RUARY 1949

ARCHITECTURAL forum

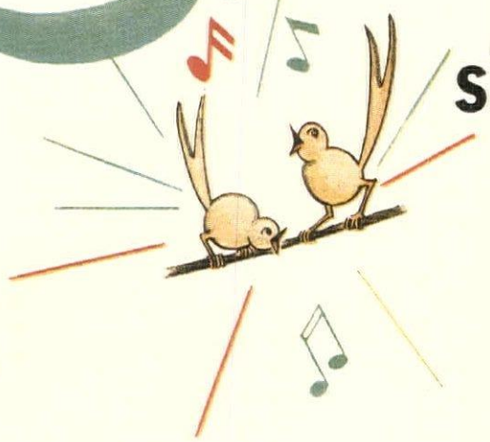
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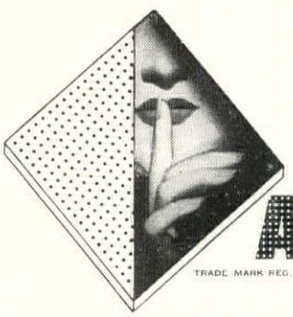
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ARCHITECTURAL **forum**

MAGAZINE OF BUILDING

FEBRUARY 1949

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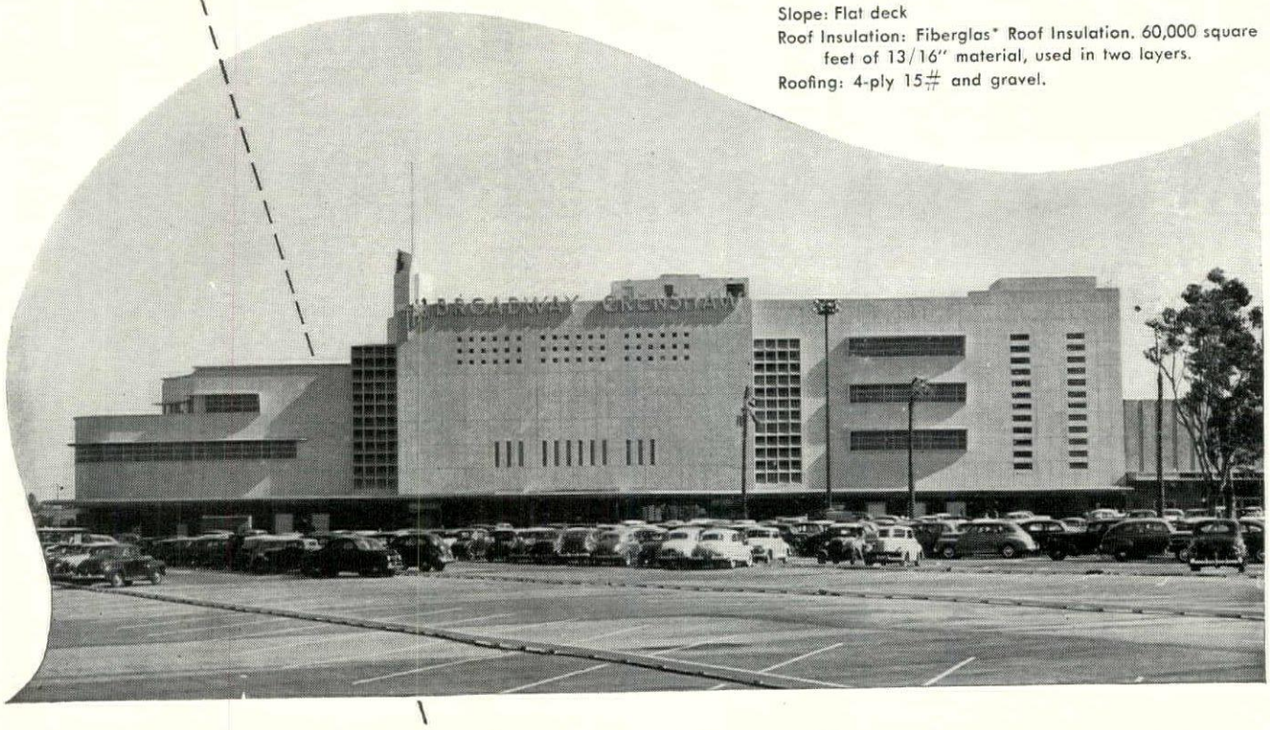
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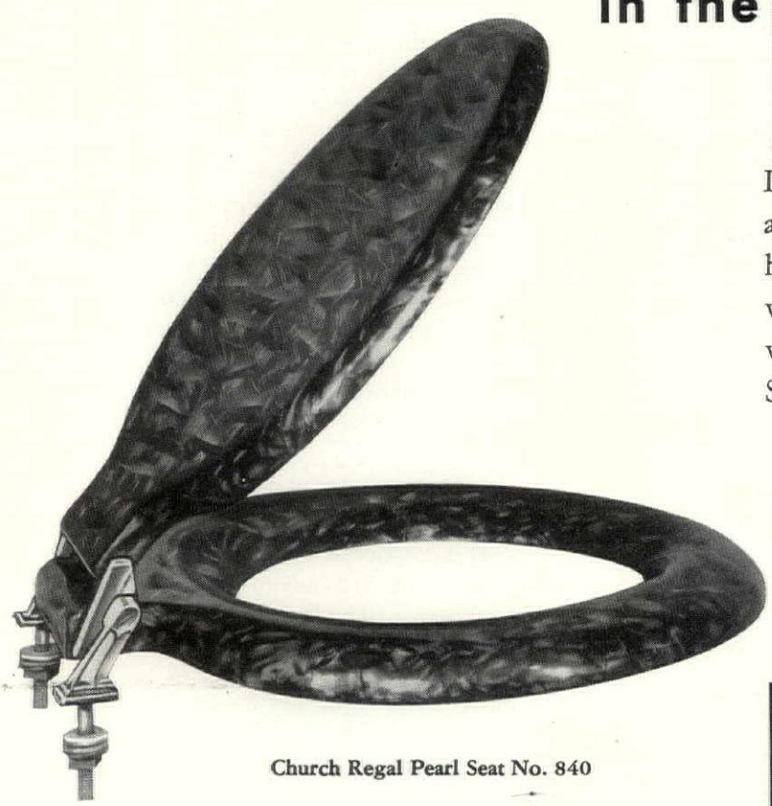
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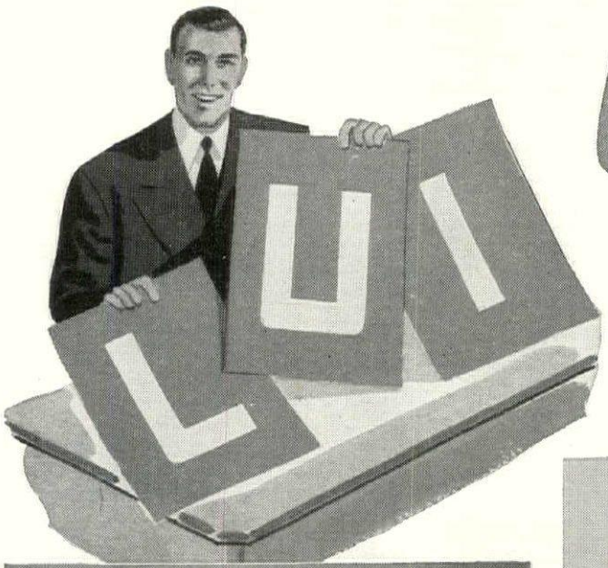
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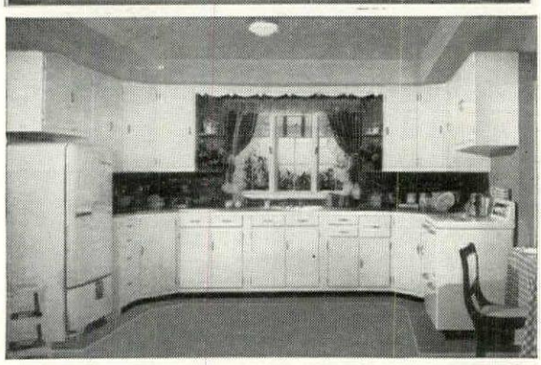
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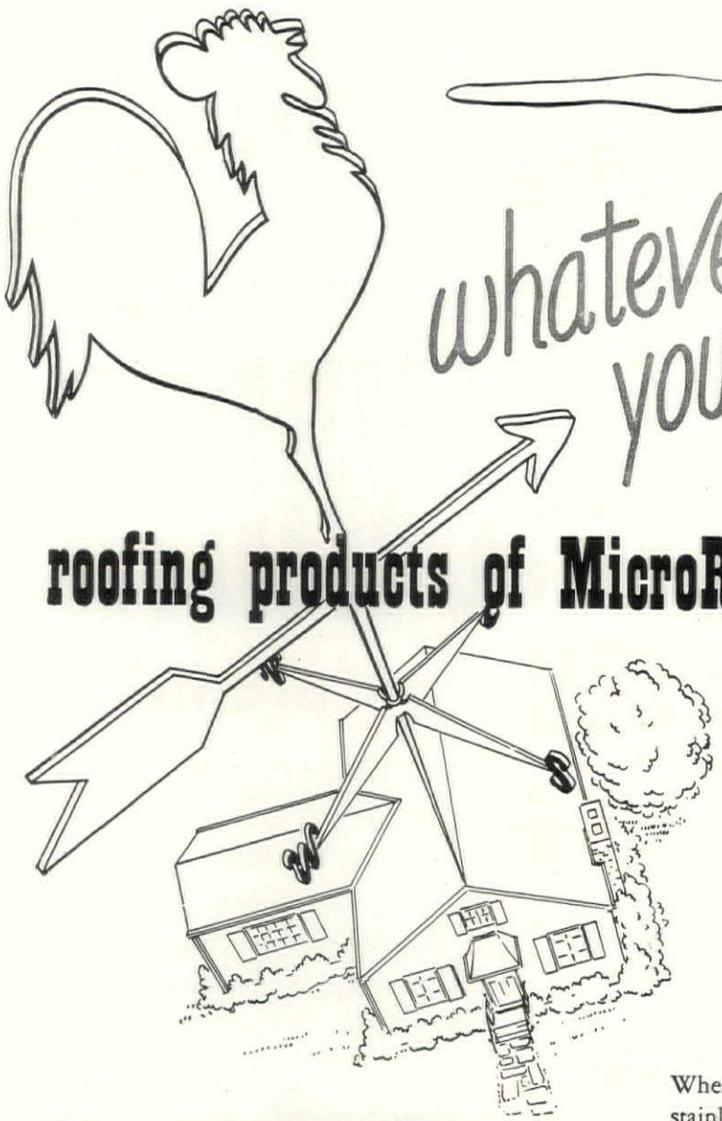
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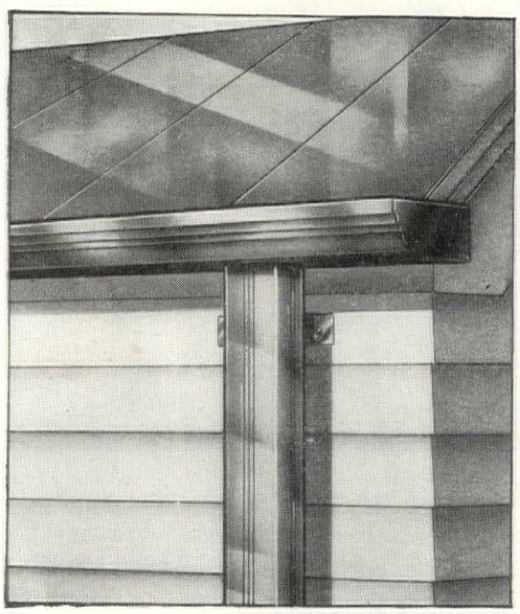


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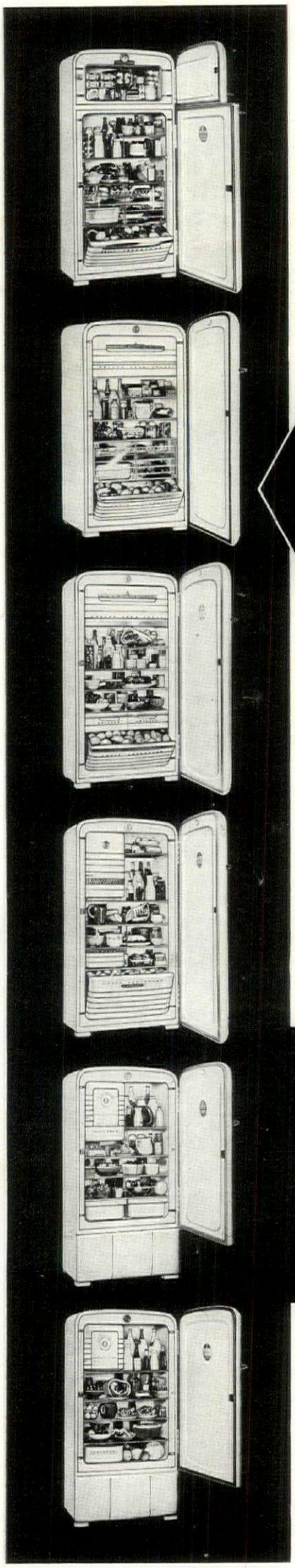
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BUILDING MONTH. All year the cloud had been there, very faint and very dim, but there —way out on the horizon. And Building's spyglass had been trained anxiously on it all the while. Each time the cloud had seemed to move, or darken, or grow a bit in size, the nation had tensed in anticipation of the storm warning—Recession. Last month, no storm signals had been flown yet, but the forward deck was crowded with lookouts. Each had his glass focused on the cloud: each caught a different shape or movement. Some saw "soggy" house sales throughout the country. NAREB President T. H. Maenner said that not only are there "a considerable number of vacant available houses for sale," but there is "a definite indication of an easing in the rental market." In Peoria, Ill., he said, "even the public housing projects have been using classified ads to seek tenants." Similar reports came from other parts of the deck: 2,500 new houses standing vacant in Detroit, 1,300 in Portland. But others, both inside and outside the government, said it was only the six-months-old difficulty of selling the $12,000 house; those who had $8,000 houses were still in a seller's market.

Used house sales continued their year-long lag, but the month brought new evidence of the price adjustments that bring market stability. In the New York area, for example, realtors said used house prices had already been rolled back to the level of three years ago. Isolated cases of much sharper roll-backs were also reported.

Two dangerous elements that had helped inflate the building boom of the 20's were still conspicuously missing from the present market: Heavy second mortgage activities and speculation in real estate bonds. Although residential mortgage debt was the highest in U. S. history, the bulk of it this time was in the prudent hands of the substantial institutional investors.

Home building off?

While most prophets were still optimistic, Armstrong Cork's economist, Wilson Wright, predicted "a total reduction in the production of new dwelling units by 21 per cent to 28 per cent;" and BLS cut its forecast of 1949 housebuilding from 930,000 to 875,000. Many operative builders blamed the decline on the drying up of easy mortgage money, but the biggest home builder of all, Bill Levitt on Long Island, gave a convincing demonstration that the public will still fall all over itself to pick up a bargain in houses, and sold 707 $7,990 homes in seven days.

The big industrial builders hoped to keep busy, and if not all their jobs—contracts in Europe and South America were prominent—would show up in U. S. building statistics, they would nevertheless show up on drafting boards and in the materials' market.

Although last month showed a substantial cut-back in the VA hospital program, other hospital plans were growing; more money will be spent this year for public housing; and everywhere communities are busier than they were last year putting up new schools.

One component of recession might be shaping up. No one could tell for sure. This was unemployment. Lay-offs in a good many industries were making headlines. But there were still plenty of jobs in Building. In December 2,109,000 building tradesmen were at work as compared with 1,978,000 a year ago.

At month's end, the look-outs were still trying to bring the shape of the cloud into focus. Most of them agreed that the image caught in a thousand spy glasses looks a lot less like the dark cloud of recession than the startling nimbus of a buyers' market.

Healthy Buyers Market

In the bracing air of a buyers' market lay the best chance of forestalling recession. This would test the industry's ability to meet its new situation and respond to it quickly and flexibly. There was evidence that a house readjustment had already begun. Although it was hard to find the builder who would say that prices were cracking, the demonstrable fact was that they were beginning to slip.

Lumber told the story: In New York markets, last month saw the sharpest break in lumber prices since the war. On the BLS wholesale index, lumber prices had been slipping at an accelerated pace since their peak of 319 last August and ended the year at 305. (1926 equals 100.) Though equally important adjustments in other lines did not show up in the indices, dealers were paring inventories and even more quietly paring mark-ups; builders to their amazement were finding it possible once more to knock down a subcontractor's quote with the threat of a competitive bid.

All this gave weight and reality to the house building industry's year-long effort to produce what it knows market stability demands: a livable low-cost house.

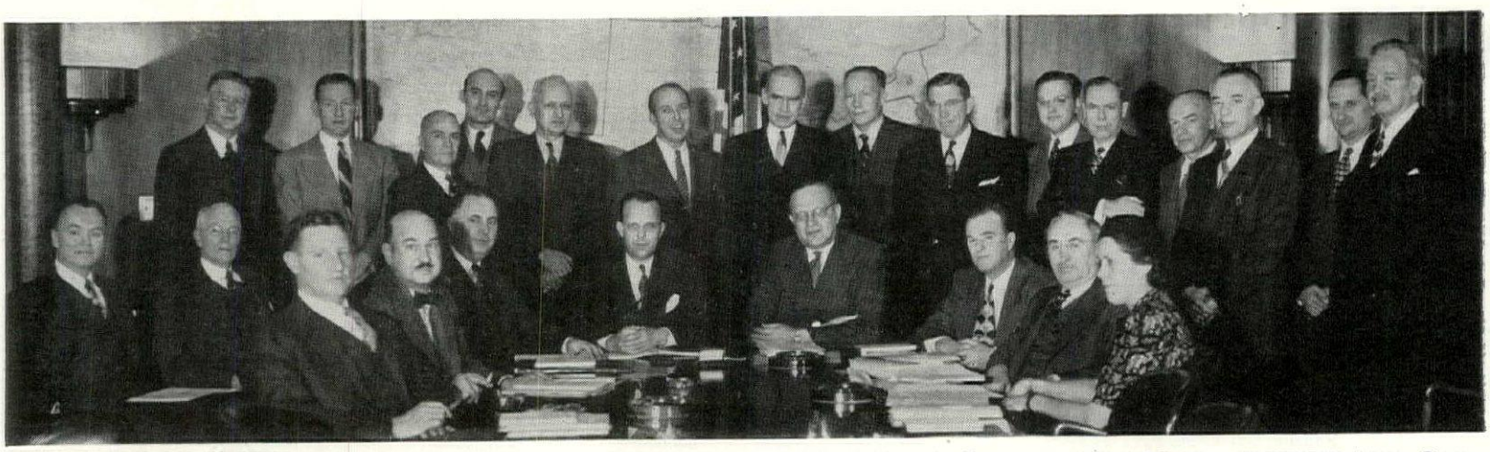
WASHINGTON

TWO TIMES T-E-W

President's public housing program starts scramble in Congress

President Truman went all out for public housing. Taking his election as a mandate for every public housing proposal the 81st Congress had voted down and more, he asked the new Congress for more than twice as many public housing units as the Republicans cut out of the Taft-Ellender-Wagner bill last spring (1,050,000 against 500,000) at nearly twice as high a maximum cost per unit (up to $2,500 a room for construction alone, against $1,500). Ultimate cost to the federal taxpayer would be $415 million a year for 40 years.

So if the Administration bill goes through



BUILDING INDUSTRY LEADERS met in Washington last month to discuss economy house with government representatives. Seated: Edmund R. Purves, A.I.A.; Walter F. Bogner, A.I.A.; F. W. Kelsey, VA; Franklin D. Richards, FHA; Raymond M. Foley, HHFA; Ralph Wright, Department of Labor; Herbert Rivers, AFL; Marjorie Egloff, AFL; (back row seated) T. B. King, VA; Warren Lockwood, FHA; (standing) J. Olney Brott, American Bankers Association; Charles M. Mortensen, The Producers' Council; Abner Ferguson, U. S. Savings & Loan League; Richard C. Dyas, RFC; Welton A. Snow, Associated General Contractors; James Rouse, Mortgage Bankers Association; H. R. Northup, National Retail Lumber Dealers' Association; F. Stuart Fitzpatrick, Chamber of Commerce; Thornton W. Sterrett, Prudential Insurance Co.; Harry S. Bayer, Irving Trust Co.; John G. Jewett, Prudential Insurance Co.; Harold P. Braman, National Savings & Loan League; J. Alston Adams, Federal Home Loan Bank Board; Dr. Roy J. Burroughs, Department of Agriculture; J. Marshall Mayes, Department of Commerce.

unchanged, some millions of Americans adjudged unable to pay economic rent will eventually be housed up to twice as expensively, if not twice as well, as the middle-class families for whom Housing Administrator Foley is struggling to invent a $6,000 economy house.

Few groups in the building industry wanted the bill passed. The realtors had voted overwhelmingly against it. The home builders were equally opposed. The manufacturers, as represented by the Producers Council, shuddered at the very thought. The AFL building unions were not saying much. Even Mr. Truman's own Housing Administrator Foley was suspected of such lukewarmness that some public housing enthusiasts were after his scalp (best bet was that in the end he would join in the cheering loudly enough to keep his job). Most of the pressure was from public officials, civic groups and the CIO.

Dropping Bob Taft

Democrats had no idea of sharing with Republicans any kudos that might derive from the program. Not until 40 minutes before the 44-page bill was put into the hopper did they show a copy to Senator Taft, giving him half an hour to read it and put his name on as co-sponsor if he chose. Taft angrily refused to tag along, so this year there will be no such bi-partisan public housing program as there was last spring. Instead, there will be one or more competing housing bills in both Senate and House, all of them, however, going as far or farther than T-E-W.

Five days after the bill was introduced the *Wall Street Journal* got hold of a 1947 housing census that showed close to 4,000,000 more "habitable" housing units created since 1940 than the figures used in making the case for 1,050,000 public housing units. First rumor was that the suppressed census had been slipped to the *Journal* by one of the President's own advisers, but eventually it transpired that the policy rift inside the Administration had not gone that far. The story had come from Republican Senator Flanders, who thinks 500,000 public houses enough.

Schism and Inflation

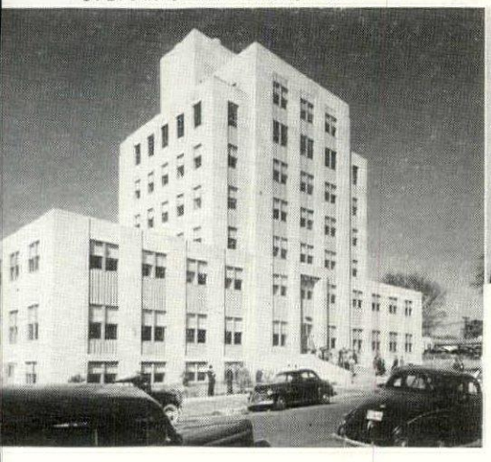
The schism was there, none the less, the same schism that has the Administration's right hand fighting inflation while its left hand fights deflation. And the housing bill, permitting up to 300,000 government units in a single year, had obvious inflationary possibilities that could upset the whole housing cost reduction program if it should succeed in adding 300,000 government units in a year when private enterprise was putting up 900,000. (Actually this was none too likely, for there was good reason to believe quite a few private enterprise units would be killed off by the government program. How long would the insurance companies, for example, go on erecting housing to compete with government units erected at equal cost to rent for half as much?)

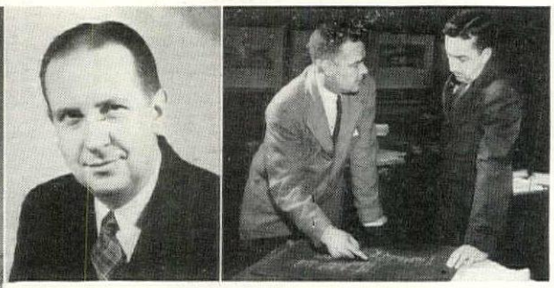
Anyone's guess was good as to just what Congress would finally do about the bills. Almost certainly the end product would be less than the President had asked, but more than the T-E-W program Congress turned down last summer.

FIRST HEALTH CENTER BUILT with governmental help is completed

The first Public Health Center to be completed under the Hospital Survey and Construction Act—the program of federal aid for the construction of health facilities—was dedicated last month at Birmingham, Ala. A seven-story, reinforced concrete building, it cost $1 million—$300,000 was provided by the government. The Public Health Service, administering agency, passes on plans for both hospitals and health centers submitted by states. By last month, it had approved more than 600 hospital projects, involving $100 million of federal funds.

U. S. Public Health Service Photos





Dr. Leanord Scheele, Surgeon General of the U. S. Public Health Service, left. Right, Marshall Shaffer, chief architect of Division of Hospital Facilities with Dr. John R. McGibony, assistant division chief, reviewing plans for new health center.

$18 BILLION CHECK PLUS

Executive would be freed of all congressional controls on housing

At first the Administration's public housing bill had looked merely like the biggest housing check Congress had yet been asked to write. But as conscientious Congressmen and an anxious industry worried their separate ways through the bill's 44 pages, it was clear that S. 138 (and its counterpart in the House) was more than an $18 billion check. It was an almost unparalleled peacetime delegation of spending power to the Executive and the wide discretion given the President on how much, where and to whom

benefits might be granted also carried with it tremendous political power.

As introduced, the bill would relieve the Executive of almost all Congressional restraints on public housing. Even that most jealously guarded Congressional check—the power of appropriation—would be released. More specifically:

- The Executive could raise his loan funds by issuing government bonds without going back to Congress for an appropriation, and he could so commit the government's credit by contracting for grants and contributions that Congress would have little choice but to validate his commitments.
- The Executive could raise the cost limits on public housing to amounts almost sufficient to build luxury apartments.
- Public housing standards would be left wholly to Executive determination.
- Occupancy tests are also, within vague and elastic restrictions, left up to the Executive.
- All housing statistics would be put under the control of those directly in charge of housing operations, making an independent check-up more difficult.
- The Executive would have wide latitude in determining what constitutes a slum or a deteriorating area.

HOSPITAL CUTBACK

VA revises its medical plans at a $280 million savings

A sharp reduction in the Veterans' Administration's estimate of the number of hospitals veterans will need will reduce or eliminate 38 of the 63 projects now in the planning stage but not yet under contract. VA, making the announcement last month, said the cut-back would save the government $280 million. With the announcement, blueprints for 24 new hospitals which were to have been built in cities across the country went on the shelf, and 14 other plans were to be revised downward in bed capacity.

A reduction of 16,000 beds in the VA expansion plan will cause "no changes . . . in the present liberal policy of hospitalization," said Administrator Carl R. Gray. VA has 31 new hospitals in various stages of construction whose completion will not be affected.

Biggest hospitals eliminated were five 1,000-bed units planned for New York City, Houston, Memphis, Toledo, and Gainsville, Fla. Four of the five big cancellations were neuropsychiatric hospitals.

AWARDS

KENTILE WINNERS

New York jury selects top designs showing resilient tile flooring usage

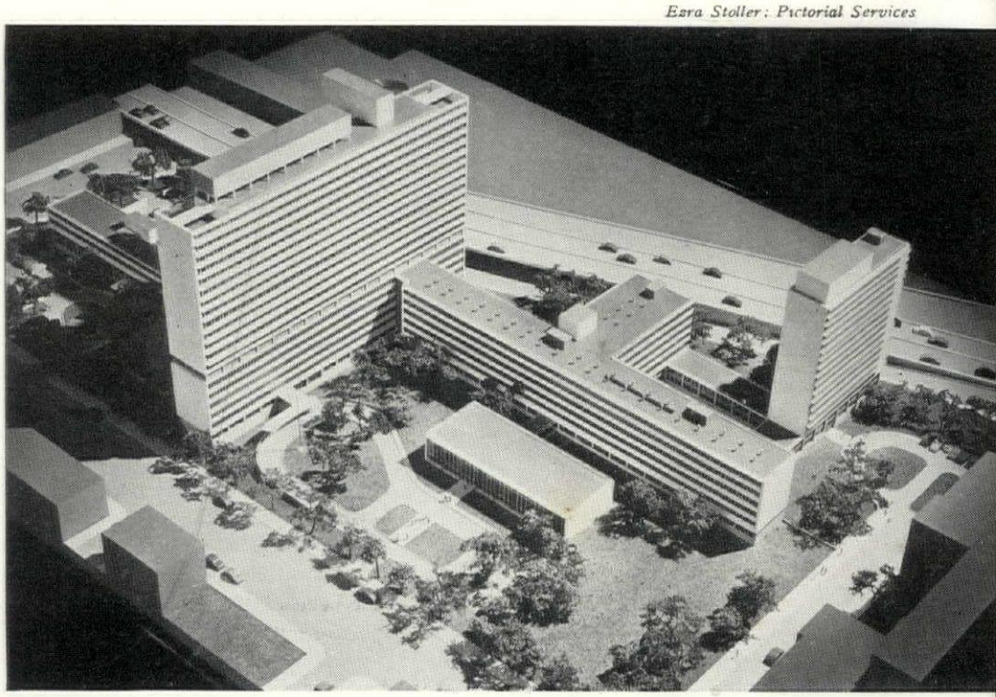
In New York, a jury selected $10,000 worth of winning designs showing the use of Kentile flooring for kitchens, candy shops, and living and dining areas. The competition was sponsored by the David E. Ken-

NEW MEDICAL CENTER FOR MANHATTAN

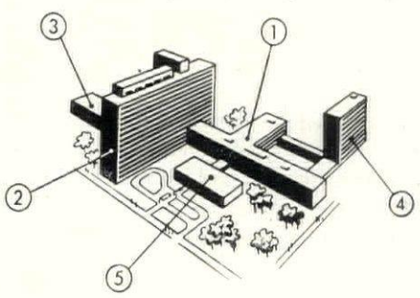
The face of Manhattan's East Bank, already changed considerably by the erection of large housing developments and the excavation for the United Nations' permanent home, will soon sprout one other giant landmark: a five-building medical center for New York University and Bellevue Hospital. Designed by Skidmore, Owings & Merrill, New York, the development of modern buildings will cover 11 acres. Rising construction costs and program expansion hiked the development's total cost ($32,744,000) to almost twice the amount of the original estimates.

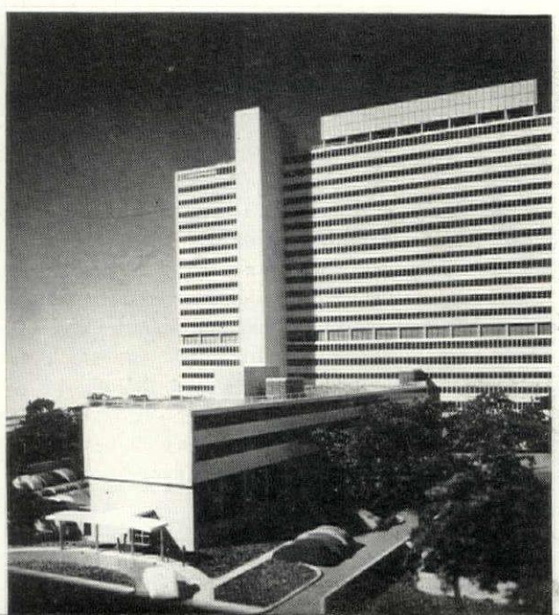


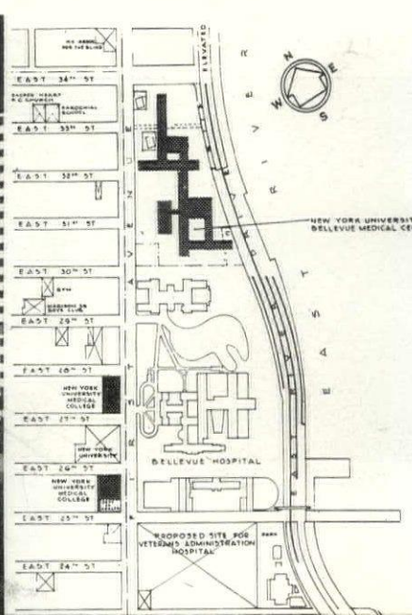
Ezra Stoller: Pictorial Services



KEY: 1. College of Medicine and Post-Graduate Medical School. 2. University Hospital. 3. University Clinic and Institute of Rehabilitation. 4. Hall of Residence. 5. Alumni Hall Auditorium. Hospital, shown upper right and background, below, has 600 bed capacity, shelf-shades above windows. Service floor, with air conditioning unit, separates research laboratories on lower floor from hospital floors.







nedy Co., Inc., manufacturers of Kentile, and conducted by FORUM with the approval of the American Institute of Architects.

Jury members were Morgan Yost and Richard Bennett, Chicago architects; Cameron Clark, New York architect; Theodor Muller, New York decorator, and Maxine Livingston, of *Parents'* Magazine, New York. C. Theodore Larson, University of Michigan, was professional adviser.

Winners in the kitchen group: C. Russello and B. Johnson, Detroit, first prize ($1,500); George Cooper Rudolph, New York, second prize ($750); Harlan E. McClure, Minneapolis, third prize ($500).

Living and dining area winners: A. Albert Cooling, Los Angeles, first; Robert Pattison, Elyria, Ohio, second; Mary Royer, Los Angeles, third.



Kentile jury unveils winning entry. (l. to r.: Muller, Yost, Livingston, Clark, Larson, Bennett)

Candy shop winners: George Cooper Rudolph, New York, first; Mrs. Barbara Upshaw Siegel, Chicago, second; Thomas Weatherwax, Philadelphia, third.

Honorable mention awards ($50) went to 45 contestants.

FURNITURE DESIGN

International competition winners will not be released until fall

House furnishers will have to wait at least until fall to see the winning designs in the International Furniture Competition co-sponsored by the Museum of Modern Art and the Museum Design Project, Inc. (FORUM, Feb. '48). Last month in New York City, competition sponsors awarded $16,250 worth of prizes to eight American, British and German designers. But they will release no details of the prizewinning low-cost, multi-use furniture until it has been mass produced and placed on the market.



Knorr Latimer Day Leowald

The competition specified furniture which will fit into new homes and housing developments and sell at prices within the average man's income. From the 3,000 entries from 31 countries, the competition's seven-member jury said they found a trend toward demountable furniture, units with as few parts as possible.

First prize co-winners ($5,000) for seating units were 26-year old Don R. Knorr, who works for Eero Saarinen at Bloomfield Hills, Mich., and Professor Georg Leowald, Berlin-Frohnau, Germany. (Germany submitted more entries than any other foreign country.) Second prize ($2,500) was also divided — between the team of Charles Eames, Los Angeles, and the University of California, Los Angeles, Group, and OSS veteran Davis J. Pratt, instructor at Chicago's Institute of Design. Alexey Brodovitch, art director of *Harper's Bazaar*, took third prize ($1,250).

Only the first prize ($5,000) was awarded in storage units. It went to two Englishmen: Robin Day, 33-year old designer of general industrial products, and Clive Latimer, teacher at Britain's Central School of Arts and Crafts.

James L. Prestini and the Armour Research Foundation of the Illinois Institute of Technology, where he works, together won $2,500 for the best research report.

Honorable mentions, carrying no reward, were given for a seating unit design to John O. Merrill and John B. McMorran, of the Massachusetts Institute of Technology; for a storage unit design to Ernest Race, of Great Britain. The judges did not award the Simmons Prize, offered for a sleeping unit convertible for daytime use; they said that none of the designs submitted were superior to those already in use.

PRICES

HOUSES AND AUTOS

Car manufacturers advise housebuilders switch to assembly line

The two possessions the average American prizes most are his house and his automobile. Once, back in 1910, he could buy them both for the same price (a typical five-room frame house cost about $1,600, a new car $16 less). Today his automobile costs just about the same (1948 average: $1,714); his house represents a substantially larger investment.

Last month, automobile manufacturers could no longer contain their pride in the sustained price level which they have held over the last 28 years in spite of the steady improvement of their product. They decided to give a word of friendly advice to their housebuilding cohorts. Housebuilders, said the Automobile Manufacturer's Association, in its monthly *Automobile Facts*, could have done as well if they had followed the automobilers' example in switching to assembly line techniques.

(Continued on page 16)

MUNICH DIGS OUT FROM UNDER RU

When the U. S. 7th Army, in the spring of 1945, pushed into Munich from the west, its tanks were forced to cut paths through seven million tons of dirt and brick. Of Munich's 163,000 prewar homes and buildings, only 1,270 had been untouched by bombs, bullets or shells. The rubble of Bavarian glory—the aged churches, the new temples of Nazidom—throttled the traffic and the life of the city.

The American Military Government started moving the wreckage almost before the allied front lines had pushed on out the other side; in a few months it turned the job over to the city administration. Crawling out from beneath the rubble of war would be the first step in Munich's *Aufbau*—the German's word for rebuilding.

The beginning of 1949 found Munich's incredible job more than half finished, and gaining speed. Four million tons of debris had been carted to the city's outskirts and piled there in two giant pyramids. The remainder is being moved at the rate of 15,000 tons a day—scooped into little ore cars and carried through the shattered streets by the diesel engines which pulled street cars during the power-shortage war days. By year's end, the twisted, narrow paths of Munich should be rubble-free.

Another year may find, as well, the beginning of the new Munich, the shape of the city that will finally grow from the mangle of ruin and twisted beams. What form it will take is currently Munich's No. 1 problem. With the allied reform of German currency last June, and the resulting release of black marketed building materials, tiny one-story brick and frame shops have blossomed in the debris along Neuhauserstrasse and Kaufingerstrasse, Munich's principal shopping streets. Construction has increased 30 per cent. More than 4,500 dwellings and business structures are either under repair or in the process of construction. Buildings which were not completely destroyed are laboriously fitted together again. But the pattern of postwar Munich is still to be found.

Once before in their 800-year history, *Müncheners* were forced to rebuild their city. After a fire in 1327 leveled medieval Munich, the task of reconstruction lay with the people; and over the centuries the new Munich rose in a carefree Baroque and neo-Gothic flourish. *Müncheners* today are disposed to recapture that flourish. They want to fit together the bombed-out links with their past, replace their city brick by brick.

AMG officials, and the planning experts they have imported from America, see an opportunity for a new and modern Munich, carefully planned and laid out. The Germans, who have complete responsibility for their city plans, have listened to the Americans' advice. But at this point, more than three years after the first allied troops poked their bayonets into Munich's rubble, there is still no accepted plan for the reconstruction of the city.

S REBUILDING but without definite plan



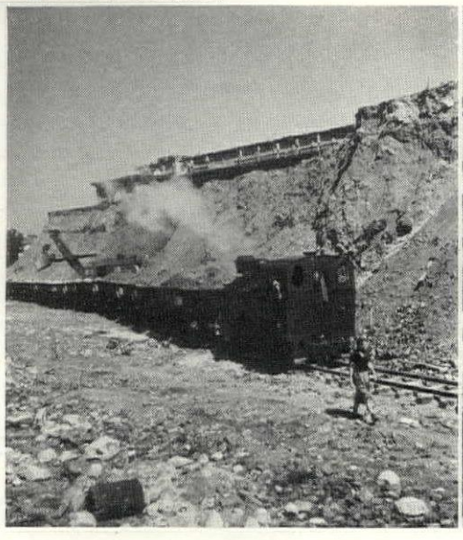
bble is scooped from Munich's eets and carried in a train of ore s to the outskirts (right), where it is mped in giant mounds. There, Ger- n laborers recover crushed brick ps, which are ground and made into w hollow bricks. These will go into reconstructed Munich.



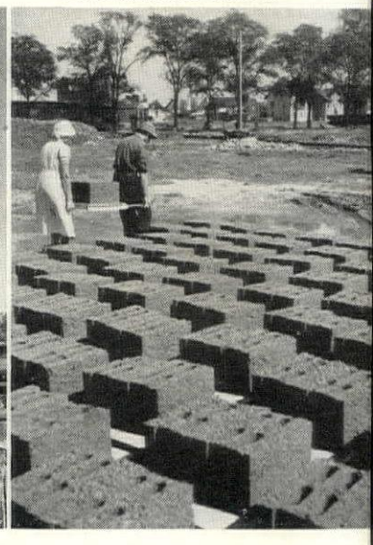
Only the shell of the old City Hall, built in 1315, remains. A traffic bottleneck on a main thoroughfare, the Americans want to tear it down; Germans insist on restoring it. Travelers rest on steel beams (right) which will go into reconstruction of heavily-damaged, once glass-domed Bahnhof (railroad station).



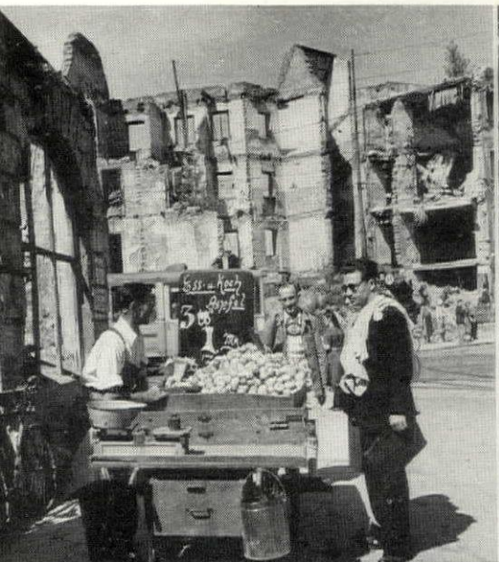
Victor Jorgensen—SCOPE



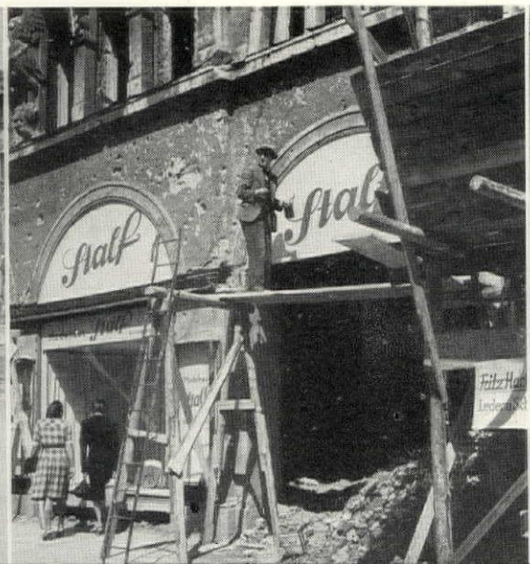




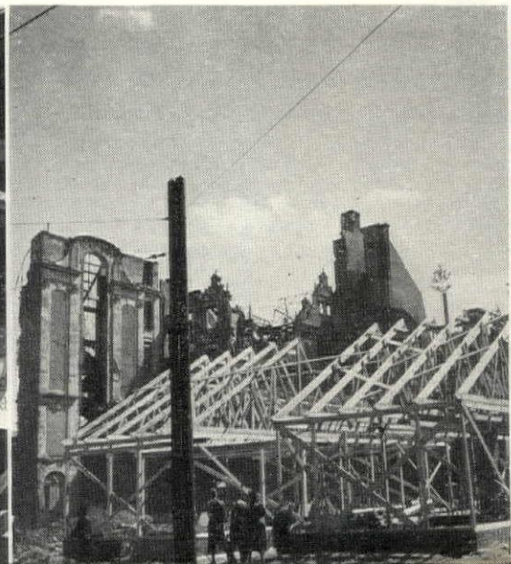
mmerce is no problem in the spring- e. Fruit and vegetable stands sprout ong the ruins. Since currency re- m, hundreds of such stands have peared.



Sign painter puts the final touches on new store's name before debris is removed from inside. Many little stores are opening, carved from the shells of bombed-out buildings.



Against background of war's holocaust, new temporary frames for shops and houses appear. These will be torn down when final city plans are drawn, but Munich is in a building mood.



Said AMA: "Today's house is still built with essentially the same hand tools used in 1910 . . . Car makers abandoned hand tools, in favor of machinery that let them build more and better vehicles at lower cost. If today's cars were built with 1910 tools, they would cost about $60,000."

Housebuilders, aware of the benefits of mass produced commodities in high demand, were also aware that in 1910 the automobile was new; subsequent sudden demand for the new product paid for machine tools. Only in the last few years has effective demand for houses been comparable to the demand for automobiles—and those years have seen the advent of the mass produced house.

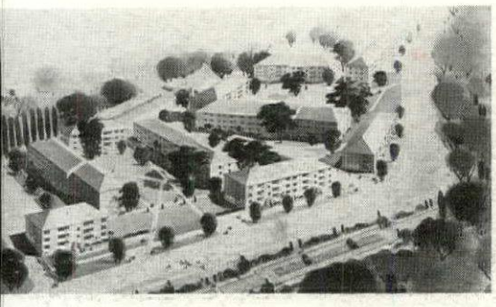
HOUSES

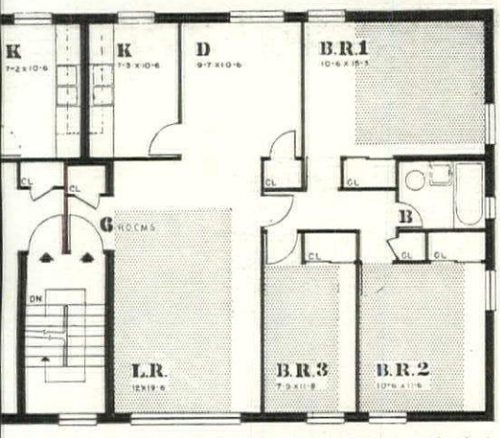
PACE SETTER

New York architects widen rooms by eliminating "gingerbread"

The construction money that goes into trimmings and "gingerbread" can widen a room, provide more window space. Working on this simple principle, two New York architects have turned out a rental project that looks like a pace-setter for the FHA 608 program.

When George Nemeny and A. W. Geller undertook the 21-building Centennial Gardens project in Syracuse, they resolved not





Above, Centennial Gardens project. Shaded area of one unit's floor plan (below) indicates minimum room dimensions permitted under FHA's Section 608 Program.

to stick to FHA's minimum standards, as most conventional builders are forced to do. By leaving out the gimcracks, they were able to build living rooms 12 x 20 ft., bedrooms 12 x 14 ft. (FHA's minimum specifications would have permitted a 150 sq. ft. living room, a 100 sq. ft. bedroom.)

Moreover, they were able to get their mortgage. Said Geller: "The significant thing is that we took these hard-headed building financiers and convinced them that it would pay to go beyond the bare minimum FHA 608 standards." D. Allan Dillenberg, president of the Centennial Gardens Corp., project sponsor, thought the large rooms would make the project a good long-term venture. The plan, he said, was good enough to hold its rentals ($85 for 4 rooms; $125 for 6) even in a declining market. It was built under the old 608 $1,800 room cost limitation, with additional allowances for site development and garages. Total cost: $1.5 million.

Each apartment has exposure on three sides through large windows overlooking a nearby park. Nearing completion now, the project will house 126 families in units ranging from four to six rooms. Bryan J. Lynch was landscape architect, and Peter W. Bruder, consulting engineer.

MASS PRODUCED FAILURE

One builder sees no future for large-scale, speculative operations

John E. Byrne was one of the first to see that America's housebuilding future lay in the hands of the large-scale speculative builder. Before and during the war, his giant Byrne Organization, Inc., turned out massive developments in Houston, Dallas and Norfolk, built Pacific air bases for the Navy, chalked up a diversified construction total of $150 million.

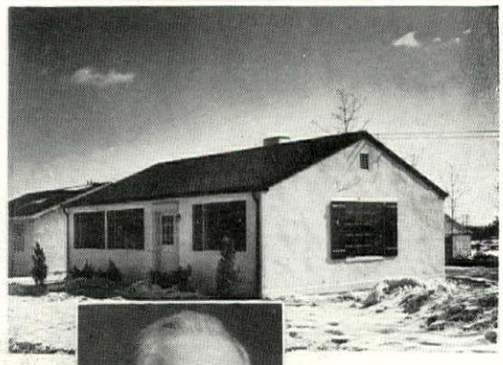
Its first postwar project (1947) was tremendous. With $391,000 worth of equipment (owned by Byrne himself), 1,200 steel-framed houses were fabricated on a 299 acre site at Harundale, Md. The houses, each with the same 988 sq. ft. plan, were intended to sell for $6,950 and offer every veteran in nearby Baltimore a home.

Last month, 450 of Byrne's Harundale houses were vacant. Unable to sell more than 440, he had offered the rest for rent. And Builder Byrne was a sour man. He said he was through with housebuilding, that the builder who erects a 1,000-home project by mass production methods stands to lose his shirt.

Why had Byrne failed at Harundale? Others who had seen the same face of the future were stockpiling huge successes—Frank Sharp in Houston, Fritz Burns in Los Angeles, Bill Levitt in Long Island. Byrne's answer was based on his own experiment, but it would seem to speak for all large builders: his house's high price tag had scared the public away. As he finished his houses, he had been forced to raise their prices—most to $7,700, some to $10,000. He had good reasons:

- Non-productivity of labor. (A latter-day switch from open shop to union labor had resulted in better production, however.)
- Large overhead—in building and in maintenance.
- Erratic arrival of materials.
- Large land development costs. Byrne was particularly bitter about FHA's insistence on paved streets, curbs and gutters, even paved aprons and runways toward garages. Harundale home sites, he said, looked more like the sites of luxury homes than low cost houses.

Builders wondered if there were other reasons. Many believed that Harundale's $365,000 worth of cranes and trucks and earthmovers, the nine Quonset type huts





Harundale house: the price tag kept rising

Byrne

filled with assembly lines would have to be used not only efficiently but many times to be profitable. As one put it: "It was too tremendous a preparation for such a limited size project." Others wondered if part of Byrne's failure was simply that his conventional house (see cut above) solidly built though it was, had failed in its appeal to the public—even a public paralyzed by a desperate need for housing.

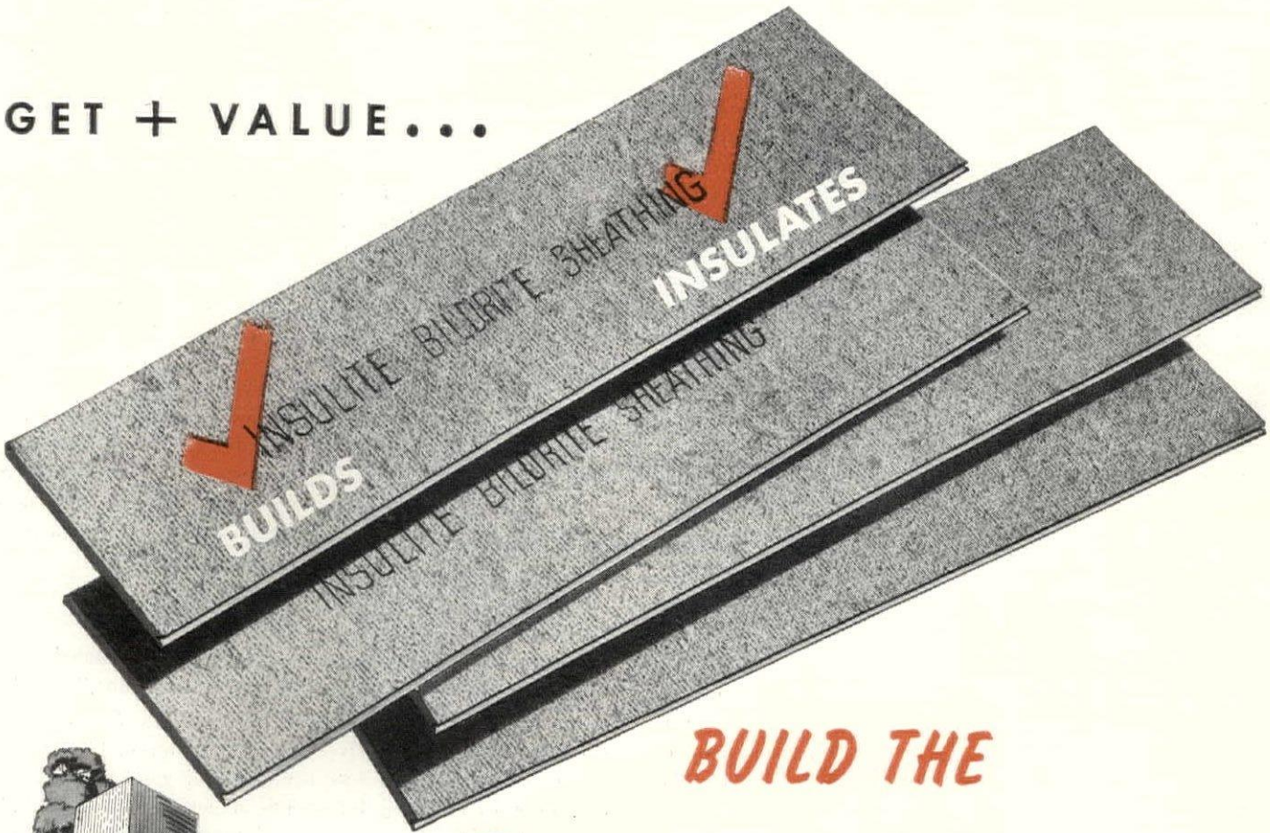
SPUTTERING SKYROCKET

NAREB stamps out Nelson's cooperative housing plan

The National Association of Real Estate Boards was in no mood for fireworks. The cooperative housing skyrocket touched off by Executive Vice President Herbert Nelson (FORUM, Jan. '49) was sputtering when it landed last month in the middle of NAREB's Board of Directors meeting in Washington. The Directors stamped out the last flickers. Their decision: "Returned to Committee for further study."

One member of the association's Washington committee gave the plan its epitaph before a vote was ever taken: "It is," he snapped, "as dead as a doornail." He was sore, as were the committee's other members, chiefly because of a "leak." Nelson had released no cost details of his plan, had said only that it aimed at 25,000 units a year through cooperative societies receiving direct government grants and subsidies. But the day before the convention, a New York newspaper had revealed that the plan's maximum government subsidy expenditures would probably *(Continued on page 18)*

GET + VALUE...





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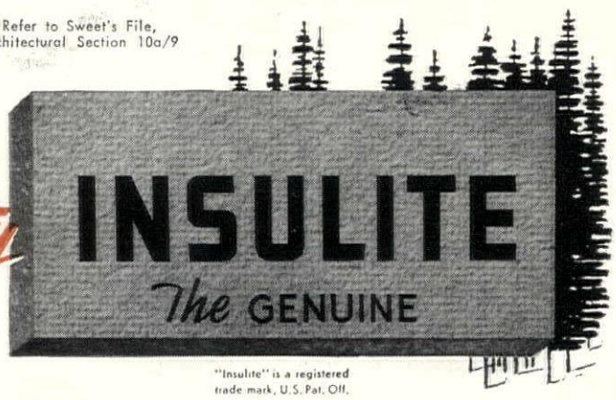
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Refer to Sweet's File, Architectural Section 10a/9

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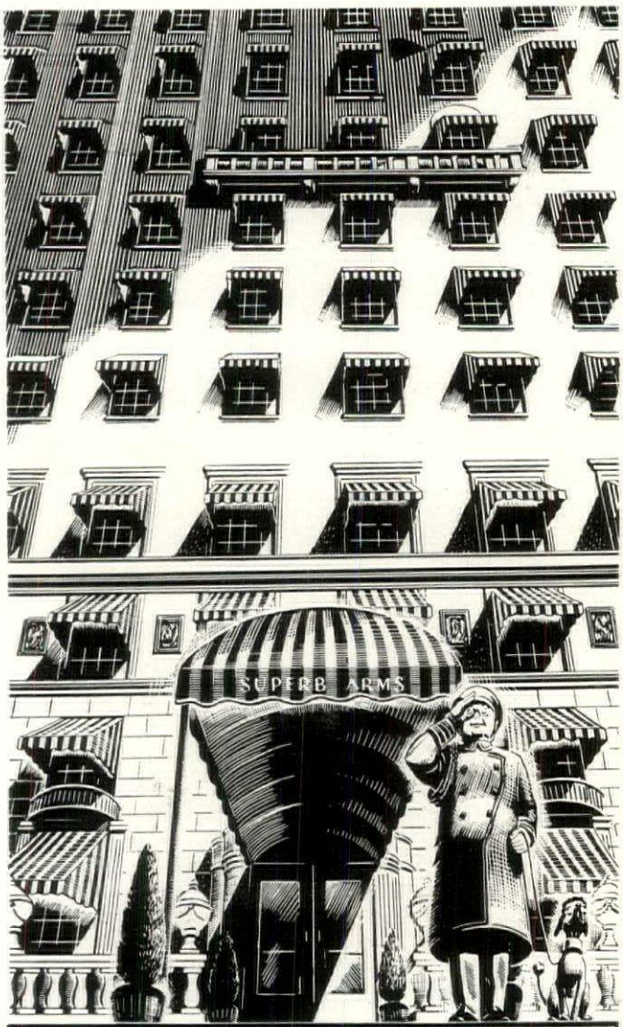


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1-9

NEWS



CANVAS AWNINGS

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exceed those of the Taft-Ellender-Wagner bill's public housing provisions.

This was the second time in the last two years that the Board of Directors refused to be sold one of big-thinking Nelson's big ideas. (Late in 1947 they had nervously dropped his plan to make a political force out of the association's auxiliary National Home and Property Owners Foundation; they were worried about public resentment of "real estate lobbies.") The Board also decided not to raise members' dues from $10 to $15 to pay for an all-out offensive against "socialization of the Building industry."

CONNECTICUT

Governor Bowles wants to get 10,000 rental units by subsidizing Builder

Before he was sworn in as Connecticut's new governor last month, Ex-OPAdministrator Chester Bowles was kept waiting four hours while the Republican House of Representatives debated whether to recount the November vote which gave Bowles his narrow (2,285) victory. When he finally was inaugurated, old-time New Dealer Bowles went right to work outlining for Connecticut a New Deal all its own.

His first project: a frontal attack on Connecticut's housing needs, estimated at 37,000 units. Bowles wants to get 10,000 of them built as low cost rental units—by private builders—within the next two years. To do so, he asked the legislature for a $145 million subsidy, to be granted the builder to make up the difference between his costs and the low rentals. The kind of houses he had in mind were four-room detached, single-family units. Half of them would rent for $35, half for $55 depending on the ability of the tenant to pay.

Bowles also asked the legislature to replace the state's housing commission, which he considers too unwieldly, with a lone commissioner.

New Governor Bowles could probably look for early legislative approval of his requests. The Democratic Senate would offer no opposition. And Connecticut's Republican House has a record of liberal housing legislation.

NEW YORK

State will seek housing through industry "concessions," new building code

The New York *Times* gave the story its flavor: "Governor Dewey has taken off his gloves and gone to work himself on the job of getting houses built."

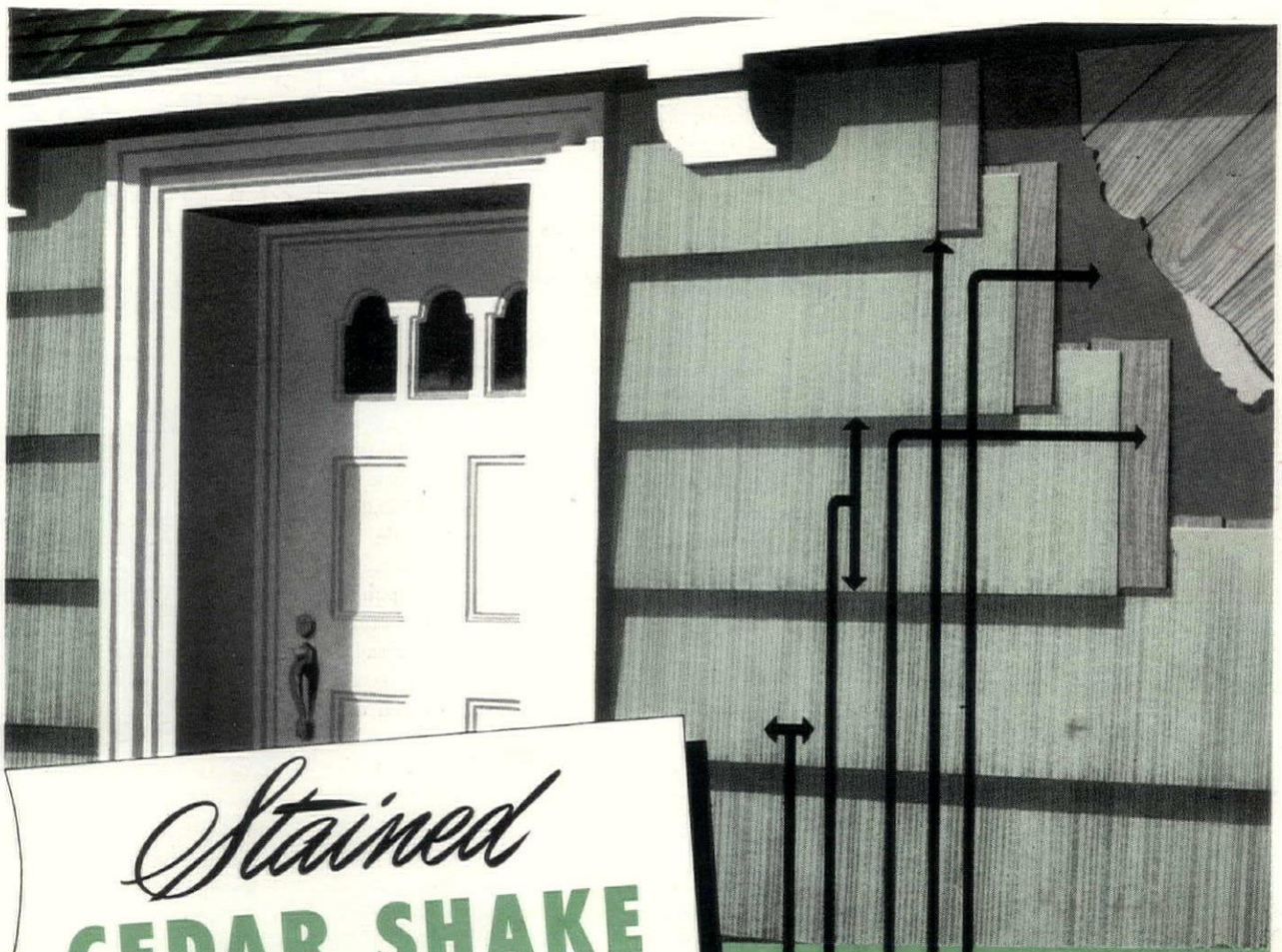
For several years New York has been trying to boost low cost housing. Housing Commissioner Herman T. Stichman has

(Continued on page 20)

Chicago Tribune Photo



AMERICAN COMMUNITY BUILDERS are completing homes at the rate of four-plus a day in the rental section of their gigantic Park Forest (Ill.) project. By last month, 270 families had moved in. President Philip Klutznick plans to turn out 75 units a week by May, complete the entire project (3,010 units, schools, churches, shopping and recreation center) by year's end. Tenant election to approve incorporation of the new village is scheduled for this month.



Stained CEDAR SHAKE

DOUBLE-COURSED SIDEWALLS

Utilize this modern, versatile treatment for exterior sidewalls to achieve economy, beauty and durability. Pre-stained cedar shakes are being specified with increasing frequency because they offer the advantages of true parallel edges, machine-squared butts and attractive "combed" groove surface resembling natural hand split shake texture. Dip-staining while still dry from the kilns assures deep penetration of the protective, life-giving stains; and adds surface seal to eliminate expansion and contraction of shakes after application.

Modular exposure (optional from 8" to 16") of double-coursed shake sidewalls offers the architect greater flexibility of design, and the utilization of inexpensive "undercoursing" grade shingles for the concealed layers makes the double-coursing method of application truly economical. Tight joints, unbroken horizontal shadow lines, color variety and simplicity of application are inherent in Stained Cedar Shakes for homes of all sizes.

- Unsaturated building paper.
- Outer course is laid ½" lower than the concealed layer.
- Unstained Red Label, No. 3 or undercoursing Grade Shingles are used for the under course.
- Weather exposures may be varied to achieve many desirable architectural effects. Sixteen-inch shakes may be exposed up to 12" to the weather. Eighteen-inch shakes allow exposures as great as 14" to the weather. Twenty-four-inch shakes allow 16" exposures.
- Two rust-resistant, small head 5d nails per shake for outer course, applied 2" above butt-line and ¾" from edges. Use a third nail in shingles wider than eight inches. Joints are tight or spaced.

REFER TO SWEET'S FILE 8b/7a

for complete details and specifications

STAINED SHINGLE & SHAKE ASSOCIATION

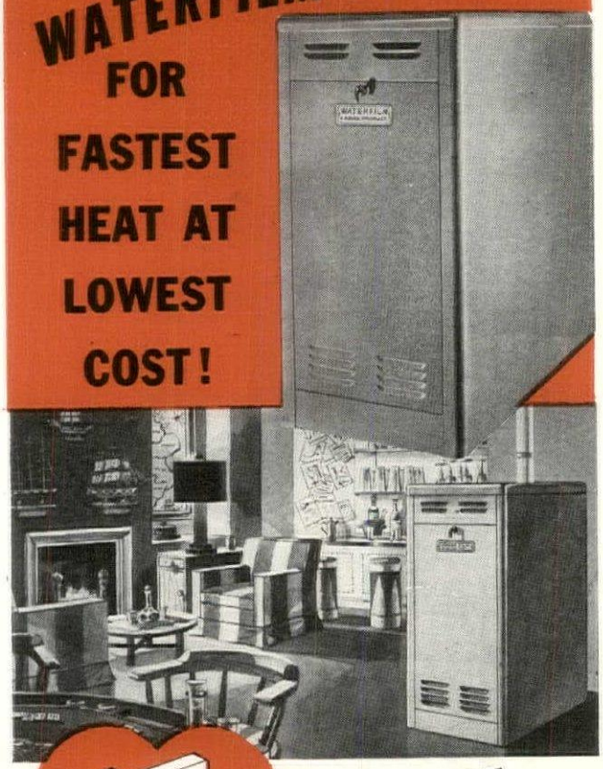
ASSOCIATED MANUFACTURERS

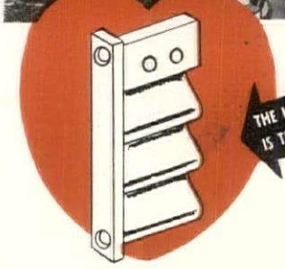
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NEWS

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EVEN ROOM TEMPERATURE THROUGHOUT THE HOUSE

FOR AUTOMATIC FIRING WITH OIL, STOKER OR GAS

conducted an Institute of Housing Studies to get an industry-wide verdict of housing's ills. The state had sponsored an architects' competition for basic design of small houses. Governor Thomas E. Dewey himself had many times commented on the need for more houses, had even singled out outdated and restrictive building codes (FORUM, Jan. '48) as one obstacle. Last month he found himself at the fore of a program to provide 250,000 houses.

The program started when Governor Dewey asked the legislature for a committee to draft a state-wide minimum code. He said that he would like to get all factions of Building to make substantial concessions to lower building costs and provide houses in the $6,500-$7,000 price group. When he observed that the state still needed 250,000 homes (half of them for the "middle income" group—the other half to include higher priced houses and 60,000 public housing units), his program was full-blown; it grew with the fever of a crusade.

Seventy-five leaders of building trade unions met with Governor Dewey and announced their solid support. The state chapter of the American Institute of Architects rushed into print with its endorsement. Commissioner Stichman said meetings between the governor and other industry groups would follow next month.

Said the *Times:* "We heartily commend the governor's interest. . . . The nation as a whole will watch with deep interest the steps taken. . . ." Others wondered what besides pious hopes would get the "concessions" made, the 250,000 houses built.

MARKET

PROGRAMMED CHECK-REIGN

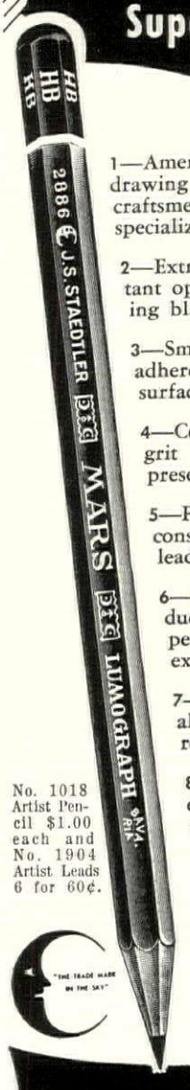
Realtor would control housebuilding's booms, busts through revamped FHA

Is the U. S. doomed to boom-and-bust housebuilding—a continuation of the cycle which in the last dozen years has seen annual housing outputs as low as 93,000 and as high as 937,000? Building experts and plain builders, bracing themselves for the bust, have tried many times to deny it in a voice sensible as well as reassuring.

One New York realtor sounding his firm "no" last month qualified his answer with a list of if's which amounted to a comprehensive, well-considered housing plan. James A. Felt is not an orthodox realtor. In the last few years he has sought government funds to finance low rent housing, tried to coordinate the activities of groups engaged in slum clearance, and led a movement to provide shelter for the push-cart vendors on Manhattan's lower east side. Now he has come up with a program to

(Continued on page 22)

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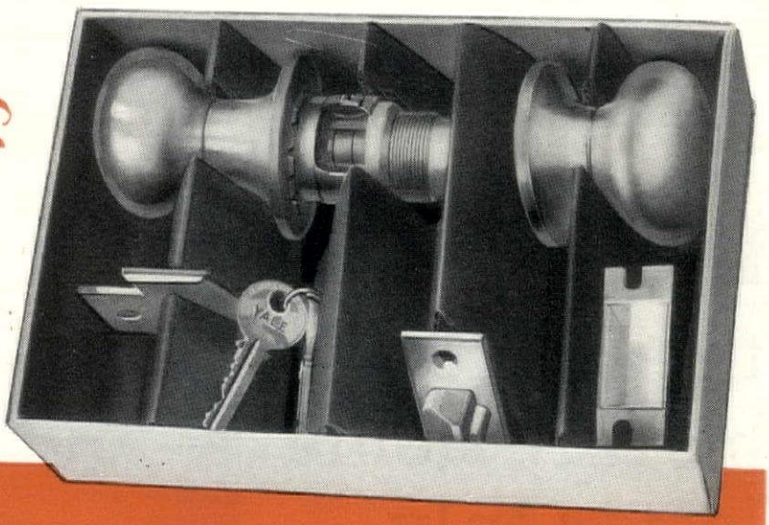
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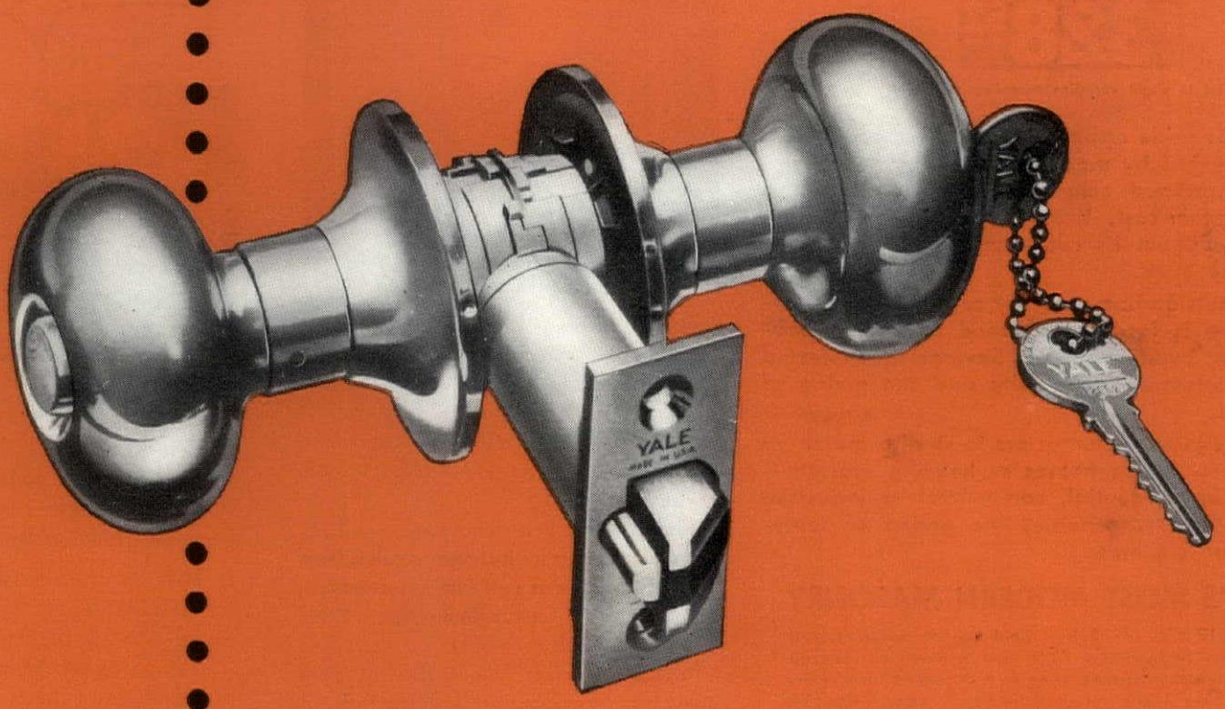
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NEWS



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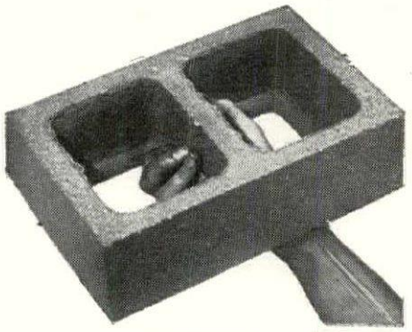
Why is such outstanding masonry so low priced? Because Brikcrete is locally processed from local materials for local building needs. Savings thus effected enable the betterment of quality and the giving of greater values.

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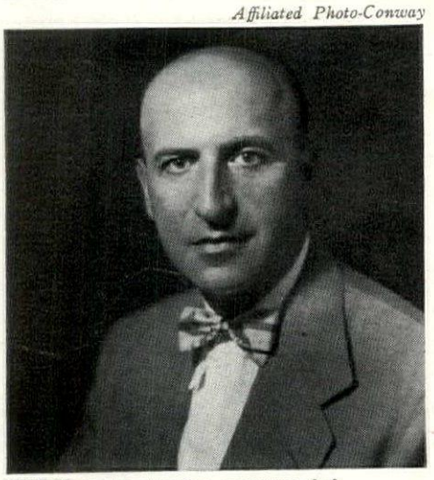
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"normalize" the building industry through a regulatory building program, geared to "basic need" instead of "effective demand" and incorporating both private and government effort.

Like many other housing thinkers, Realtor Felt believes that private builders should supply as much of existing need as they are able; that insurance and investment companies should make up the deficit; that any further deficit should be turned over to the federal government. But he sees more clearly than most that over-building in

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FELT: synchronization recommended

prosperous times is as much responsible for the building cycle's dizzy variations as underbuilding in gloomy years. He proposes that the FHA program be converted from its one-sided role as a depression bolster and used to check-reign an unhealthy boom.

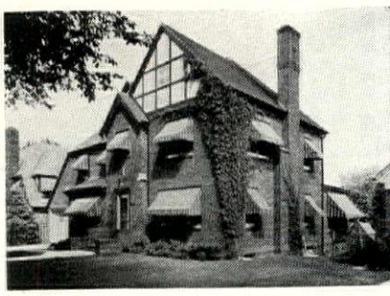
First, Realtor Felt would have each U. S. community program its housing needs from its own statistics of new family formations, obsolescence of existing units, etc. Then, to fill those needs, he would:

▸ Regulate private production through credit and mortgage insurance controls. A "revamped" FHA, Felt believes, would be the logical agency to stimulate or retard private activity—by raising or lowering the amount of mortgage insurance it grants, depending on the "disparity between supply and programmed need and depending also on the extent to which the construction industry is fully employed." It might even be necessary to "create an economic agency at the national level which would have the duty of making the all-important policy determinations as to when and how much stimulating or retarding action is necessary." Such FHA programming, however, Felt cautiously assures, need not result in a regimentation of the industry; builders can always "resort to conventional methods of financing."

▸ Develop a slum clearance policy, to be administered locally with federal assistance.

(Continued on page 24)

"WE INSTALLED WEBSTER BASEBOARD HEATING IN OUR RESIDENCE IN 1947. THE SYSTEM OPERATED THE FULL HEATING SEASON OF 1947 AND 1948. WE ARE MORE THAN PLEASED WITH THE COMFORT AND CLEANLINESS OF WEBSTER BASEBOARD HEATING . . ."



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Wray M. Scott, President and Treasurer of Wray M. Scott, Inc., leading Omaha, Nebraska, heating contractor, makes a practice of testing new developments in heating.

In 1947, he installed Webster Baseboard Heating in the living room, dining room, bedrooms, hall and stair landing of his home. We reproduce above an excerpt from Mr. Scott's letter giving his conclusions.

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They agreed unanimously that it was lighter, stronger, could take more abuse and would last forever. Take the word of these experts who know doors.

After carefully studying the exclusive Hollow Core construction, they could readily see that no other door offered as many advantages.

**The winning name in the Roddiscraft Door Contest submitted in conjunction with a 25-word statement by Miss Joan Englert, Hulsman Planing Mill, St. Anthony, Indiana. The two other winners were Lessing Whitford Williams, Partner, Geo. B. Post & Sons, Architects, 101 Park Avenue, New York 17, N. Y. and R. C. Emerson, B. H. Charles Cabinet Shop, 2214 Allesandro Street, Los Angeles, Calif.*

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NEWS

SCIENTIFIC

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This portion of the program would be utilized when the production of homes in any region lags behind programmed need; then communities could offer attractive incentives (right of condemnation, tax assistance, sale of slum areas at fair use value) to private institutions. As supply catches up with need, the incentives could be tapered off. Thus, a community would be able not only to regulate the incoming supply of new housing but "also control the rate of demolition of old housing."

▸ Let public housing be ready to step in whenever private industry fails to meet the total need.

Says Felt: "By synchronizing the efforts of our three main sources of housing, activities of private builders would be at the peak during so-called good times; investment institutions could make their greatest contribution during slack periods and the government's program might become operative during periods of depression." Some results: lower priced homes, manufacturers' readiness for "long-range and costly development work," an annual wage for labor.

RURAL ROOM

Farmers have put increased post-war incomes into new construction

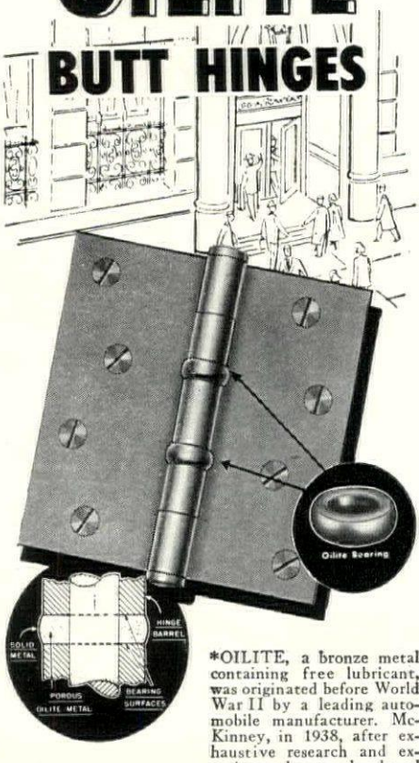
In the spectacular boom period after World War I, while speakeasy singers were still chanting "How're you gonna keep 'em down on the farm," farm incomes went sky-high. Farmers put their new money into land acquisition, but spent little for new building. By the Thirties, the majority of farm homes was classed as substandard.

This time it's different. Increased farm incomes have been going into farm construction. According to a Construction Industry Information Committee survey, U. S. farmers spent $1.1 billion on construction during 1948. This matched the record 1947 figure and raised the total amount of farm construction since 1940 to $7 billion. Of this, $3 billion represents new building (including 850,000 new farm houses), the balance maintenance and repair of homes, barns and other structures. Three out of every four occupied farm homes are now in good condition.

Another significant development since 1940: the wide rural use of fabricated materials (prefabricated poultry houses, feeding racks, hog shelters, etc.; semi-fabricated metal buildings for crop storage, garages, repair shops).

During this eight-year period of construction, farm population declined 10 per cent. Observed the Committee: "In the face of this away-from-the-farm movement, the large volume of farm construction certainly refutes the general opinion that high construction activity is dependent upon population increase. . . ."

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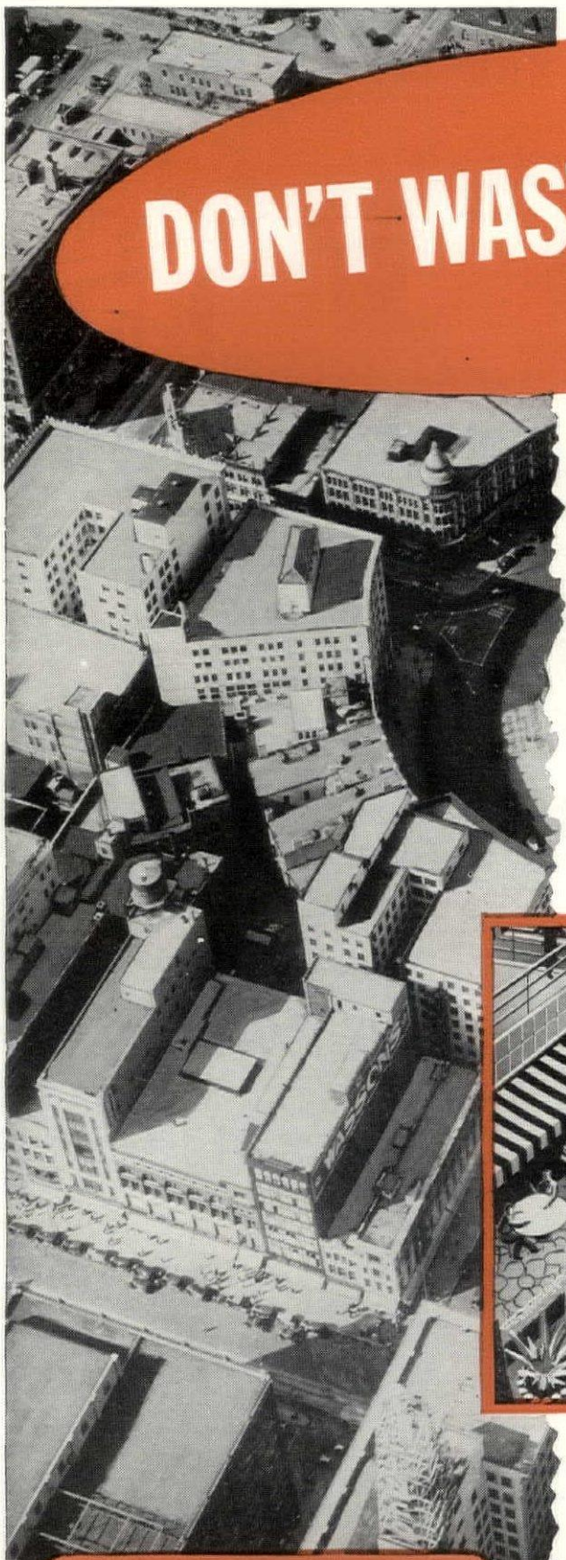
McKinney OILITE Butt Hinges are equipped with the remarkable *OILITE Bearings—made of bronze metal with ability to hold about one-third of its volume in free lubricant . . . thus providing *self-lubrication* at all times to the bearing surfaces alone. Exterior weather conditions or moisture do not affect the bearings as they will not corrode.

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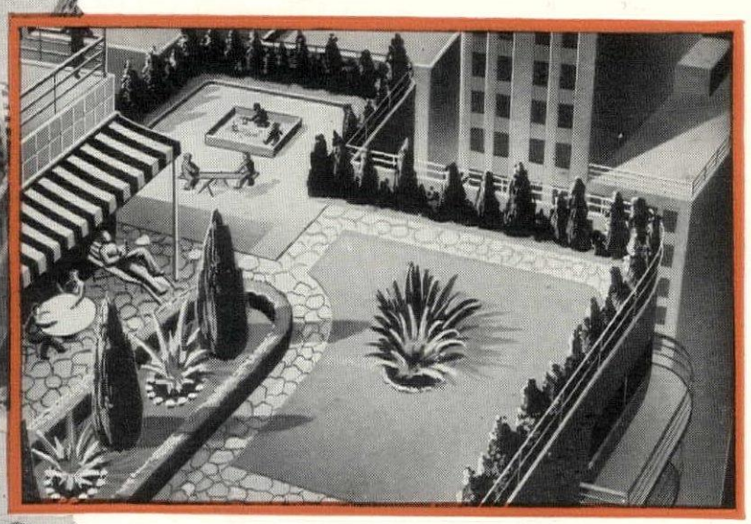


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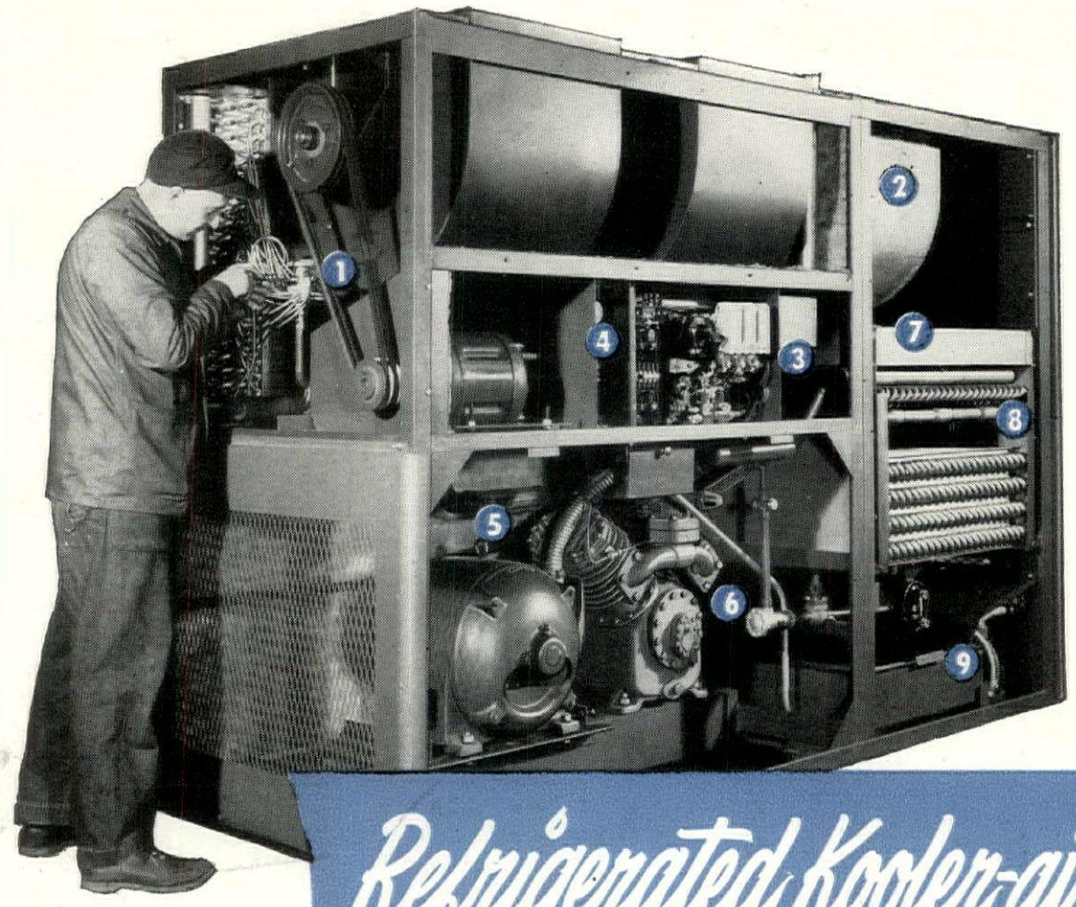
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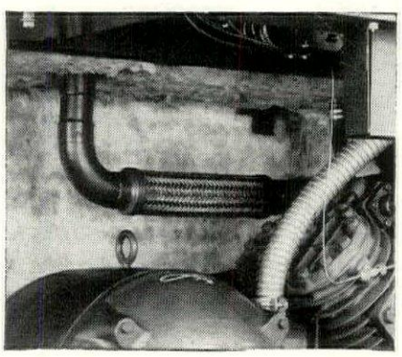
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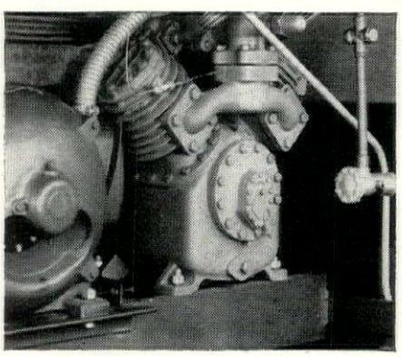


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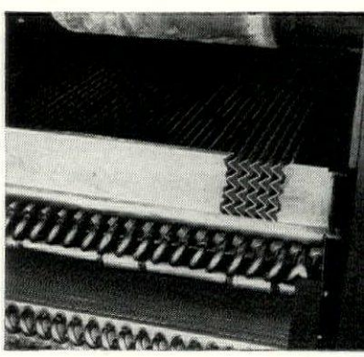
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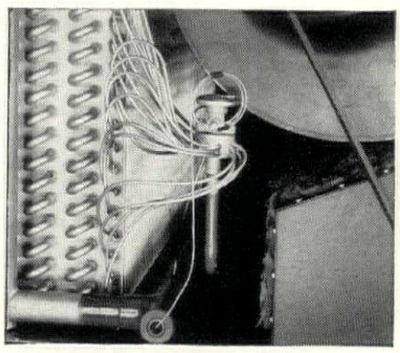
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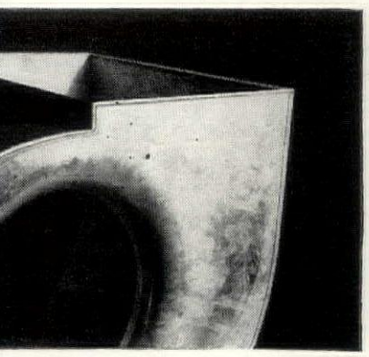
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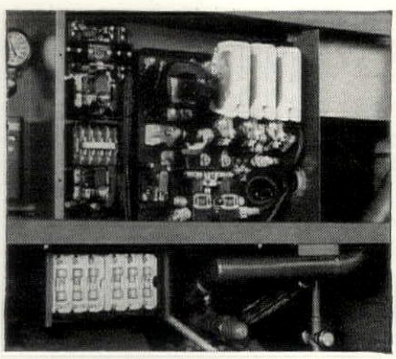
You get every one of the proved features detailed on these two pages . . . features that mean air conditioning economy, efficiency and satisfaction. You'll want to know more about Refrigerated Kooler-aire, and we'll send you complete information as soon as you tell us where to send it.



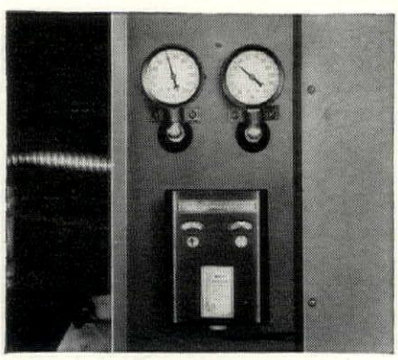
1 **Refrigerant system** is charged and tested in our plant. It is kept in perfect balance by automatic thermal controls that respond instantly even to the most sudden changes of temperature.



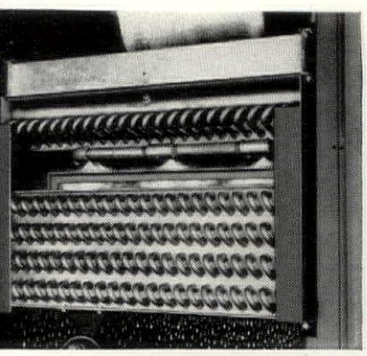
Blower in evaporative condenser is heavily galvanized *after* fabrication so that even the welds are completely protected from rust and corrosion. Efficient design assures quiet operation.



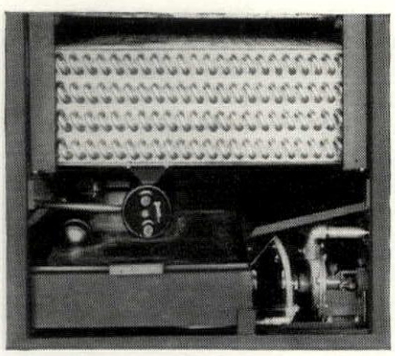
3 **All electrical circuits** are controlled from this simplified panel. Each of the motor circuits is individually protected against overload or other failure by its own fuse.



4 **Twin gauges** indicate head pressure and suction pressure of refrigerant to give you quick assurance that the unit is operating properly, that there's sufficient refrigerant in the system.



Two-stage evaporative condenser is integral part of unit. It eliminates old-fashioned water towers and expensive plumbing. It cools refrigerant to within 3 to 5 degrees of wet-bulb reading.



9 **Water reservoir** and return pump save you 95% of your water bill and practically eliminate costly water disposal problems. Automatic valve replaces evaporation losses.



10 **This name plate** on every Refrigerated Kooler-aire is the accepted symbol of the finest in air conditioning equipment . . . whether you're conditioning a store—a floor—or a building.

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LETTERS

Measure Issue draws further comment . . . Mortgagee-Mortgagor distinction drawn . . . Equitable Building firmly located in Portland, Ore. . . . German students ask American ideas.

MORE ON MEASURE

Forum:

I read every word of *Measure*. . . . I believe it is a fine job and one which has been needed for years but . . . I believe it should be developed.

1. If you could condense this material more so that the average man (who generally hasn't time to read a book of this size) could use it as standard reference, it would be very valuable.

2. While great architecture only develops out of taking care of the human beings involved, there are other sides to human needs and desires than the so-called practical. The problem of space in relation to the human being; the problem of form; the problem of color—all enter into the creation of a fine building. If you could develop these things in a similar way, it would be most helpful to the profession.

WALLACE K. HARRISON

New York, N. Y.

Forum:

. . . I hold FORUM in very high regard and I believe that your magazine consistently has done an outstanding job in exploring new frontiers, and in awakening the construction industry to the opportunities to be found in new fields of development.

Some people probably will say that *Measure* is a bit academic or theoretical, but this is generally said of those who think ahead of the crowd. At the same time, no serious student of architecture and housing can afford to ignore the striking challenge you present in *Measure*.

Measure explores new frontiers, and I am hopeful that you will follow *Measure* with more demonstrations of its application to the construction industry. In other words, you have presented the challenge. Now I should be pleased to see you describe how the challenge is being answered.

L. DOUGLAS MEREDITH
Executive Vice President
National Life Insurance Co.

Montpelier, Vt.

Forum:

The "stuff" written under the heading "Space . . . finds its measure in man" in your November issue amounts to nothing better than words strung out on top of another and effecting a kind of humbug—intellectual-philosophical mist—than which there is nothing, not even the worst architecture, worse for the cause of good architecture.

Particular exception is taken to the inflated part referring to the Wright Guggenheim Museum. Listen again to this: "Past and future meet in his present place, while before and behind him, time and space unroll together." This refers to the simple situation of a person being able, in descending the spiral ramp to look up to where he has been and down to where he is going. One could just as well say, in the course of saying a great deal of nothing, that here is ubiquity, personified.

It is so easy to recognize when a genuine experience of beauty is being described and not just a mental idea or comprehension of what would be an interesting and beautiful experience. This is where the "intellectual" comes in with his collection of dry bones. We would prefer that personal experiences of beauty in any form largely remain personal; there alone are they appropriate and unexaggerated, hence with real value to be gained, one from another.

I honor the greatness of Mr. Wright's creative mind and life in this building and in all other works and words of his that I have become acquainted with. (Just last Sunday I went over to Woodlawn Ave. here in Chicago and for the first time looked at the Robie House, built about 1900. Here is a man who knows what he is about. Excepting his own work, this dwelling puts to shame everything now being put forth as architecture.) He is the only creative mind at work in the world today—all arts and works considered. The rest are as "sounding brass or a tinkling cymbal."

FORUM would do better in the future to print more pictures of completed buildings, many more actual drawings, some data on structural matters, and occasional information on materials as to resources and manufacturing processes—all without the help of any professors or scholars. As for matters in the realm of "space and time" and so forth, there could be a minimum of this. Just at the moment I can think only of the one Mr. Wright to speak in this connection, for he is the only person I know who gives real and abiding proof that he is in touch with universal truth.

. . . There might be some months in FORUM's life (now would seem to be a good time) when it would be better to halt the presses and simply be quiet. Thereby, we may hear and see something of beauty beneath the sound and appearance of all the unseemly expression with which we and the earth are now beset and vulgarized.

LLEWELLYN BROOKS

Chicago, Ill.

Forum:

I spent more time on your November issue than on the preceding ten. My admiration for your undertaking its publication is equalled only by my awe at the extent of your success. It is much more than a measuring job. We have broken down the problems into many of their constituent parts, measured them and related them. Science does not stop at measurement, it begins there. You did not stop there either, though I suspect if you could devote two issues to this approach you would like to emphasize the relationship more in the second issue.

My criticisms will not be worth much to you because of the excellence of your accomplishment. There were possibly three areas in which I would have suggested more emphasis.

1. Human environment. Buildings should be erected not only with reference to heating, wind, rain, light, sound, etc., but also with reference to each other. How close together should they be built and how should various functions such as industry and commerce be related in the building process. Some architects have refused to accept any responsibility in this field. They will build an Empire State Building on the basis of given assumptions for land values and gross and net rent, and do an excellent technical job at the expense of investors and society.

2. I might have suggested a little more emphasis on people. Psychological factors, motion studies, need for privacy and for social contacts. You touched on that from time to time and illustrated the use of motion studies in your section on space. Office buildings have been so inefficiently designed from the standpoint of use of space that it seems to me more attention might have been warranted.

3. I would have suggested more attention to the subject of costs. Any job is a compromise between the pocketbook and the desire. What is lost if the temperature is 5° too high or too low, or the gradient is 3 per cent too much. How much, if any, money is saved by sacrificing quality. Perhaps, this is an overstatement of point, but I would have liked a little more discussion on the degree to which discomfort appears as conditions move from the optimum in any area.

I have practically no detailed comments. I appreciate your difficulty in handling heat at the beginning and space later on, and then having to go back to the discus-

(Continued on page 30)

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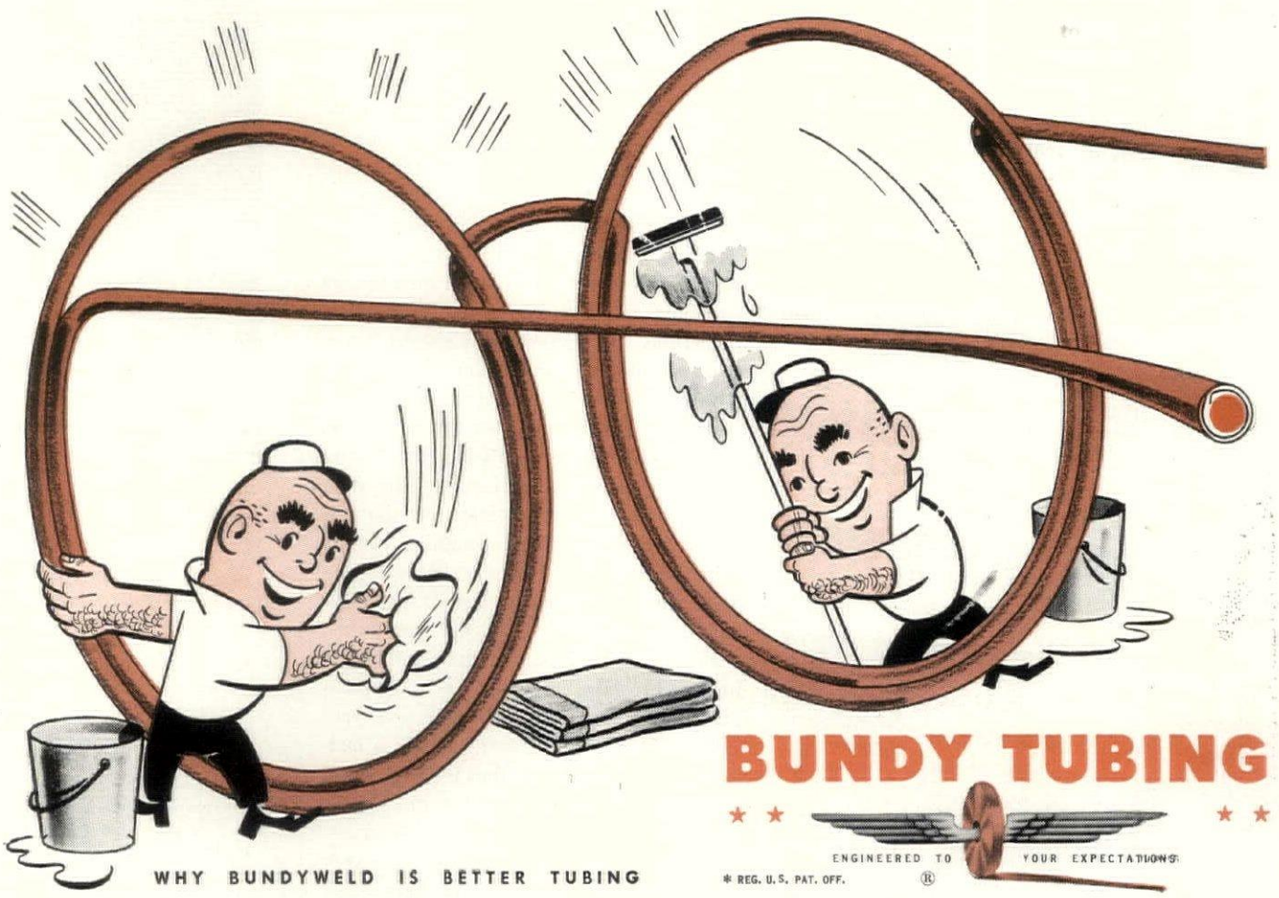
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Bundyweld is easy to bend yet keeps its shape after having been formed, thereby resulting in a more uniformly flat coil.

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sion of heat again in your space section. This illustrates the difficulties in compartmentalizing analyses and the importance of correlation. I thought the logic on heat would have been clearer, if in your discussion you would have pointed out that any object which emits heat also absorbs it. This sounds very elemental, but I suspect is no more elemental than a good many of the points on heat which you so wisely brought out. A body with an absolute temperature of 1° radiates heat. It is possible that a black body with a temperature of 1° might radiate more heat than a shiny, highly polished body of the same mass and surface with a temperature of 10°. Conversely, a black object with a temperature of 10° might absorb more radiation than a shiny, highly polished body with the same mass and surface, but with a temperature of 1°. This fact is necessary to understand the drawings and text on page 107. It is possible that all of your readers understand this point, but I wouldn't give much in the way of odds.

Now and then I had a question about statements in the text. For instance, on page 140, the discussion of double glazing in the first full paragraph is apparently related only to the periods in which the sunlight is never shining directly on the double glazed glass. At the bottom of the same page you cite the American Stove Co.'s building, one of the best examples of illumination as a controlling factor even though east and west exposures are eliminated. Something might have been gained if you had tied into this paragraph a discussion of how Mr. Welch is using direct lighting to illuminate his ceilings. On the next page, you say of sound transmission that "essentially this is a matter of mass." In other paragraphs, you have pointed out that the prevention of sound transmission can be achieved with such relatively simple devices as two panes of glass of uneven thickness which do not vibrate in harmony when sound waves impinge upon them and, therefore, fail to transmit sound. This is probably very minor as what I think you were saying is that sound transmission is a matter of mass rather than that the prevention is a matter of mass. Sound transmission is, however, a matter of continuous mass. Other adjectives are needed, too. I suspect that architects and builders know less about acoustics than about heat, for instance, so that more space is warranted for the treatment of acoustics than of heat problems.

The selection of the Welch house was a real inspiration. It fits into the thesis and illustrates where illustrations are needed. It is easy in a presentation of this sort to slip to the philosophical.

(Continued on page 34)



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Universal Sanitary Manufacturing Company of New Castle, Camden and Redlands, founded in 1901, has been a leader in the development and production of vitreous china plumbing ware.

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The Universal-Rundle Corporation produces and markets, nationally, a completely integrated line of bathroom fixtures. This line provides new availability and wider opportunity for architects and builders accustomed to product quality and economy.

Write for our illustrated brochure and a 1949 art calendar suggesting new and distinctive bathroom appointments.

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AUTOSONIC is *not* a "gadget" to open garage doors. It unfolds a whole new concept of the garage and driveway in relation to architectural problems. As an adjunct to modern living, it offers a degree of safety and comfort comparable only to such present-day necessities as automatic heating, electric lights, mechanical refrigeration.

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Comfort On cold or stormy days, an AUTOSONIC controlled door is a blessing to the home owner. Arriving home, or backing out, he has merely to touch the dash button to open or close the garage door.

Safety Garage lights (and exterior flood lights, if desired) are synchronized with door action. This means chances of hold-up or assault are reduced to a minimum. Possibility of injury is completely eliminated . . . not only obvious dangers . . . strained backs, smashed fingers . . . but *hidden* dangers which haunt the victim of heart trouble, or other ailments.

Appearance Homes equipped with AUTOSONIC are uniformly neat. The garage door is always closed. Late-leaving husbands can snap the door shut as they back down the drive. And, when the door closes . . . it locks! Prowlers cannot gain entry because someone forgot to lock the door.

Problem Driveways Often the architect is confronted with a difficult approach to a garage. In many instances, AUTOSONIC offers a solution. If the driveway is bounded on either side by retaining walls or shrubs, AUTOSONIC eliminates the need of squeezing between the car and the wall to open the door. It is equally practical for sloping drives, where there is constant danger of a "run-away" parked car. "Joint" drives cause less friction when AUTOSONIC keeps the cars in the garages . . . off of the single driveway.

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Push Button, Key Switch In addition to car control, an electrical switch is located inside the garage (or home, in the case of a detached garage). A key-operated switch is installed outside the garage door. These make the door fully automatic. (Should hand operation become necessary, a simple link is loosened, freeing the door from the operator.)

Additional Information The Vendo Company will be glad to make available detailed information, including specifications, to interested architects . . . or refer to Sweet's File, Architectural Section 15g/10.

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WHICH of these hazards gives you (or your wife) GARAGE DOOR JITTERS?









1 **STORM!** Exposure to driving rain, swirling snow and the risk of a fall on the slippery drive.

2 **ASSAULT!** The lurking danger of a prowler waiting in the darkness for you to leave your car.

3 **INJURY!** The possibility of a sprained back, smashed fingers every time you tug at the door.

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Turns your garage lights on or off at the..... TOUCH OF A BUTTON !

Imagine! Sound pitched so high you can't even hear a *whisper,* yet so *powerful* its silent voice can raise your garage door. This . . . is AUTOSONIC!

AUTOSONIC puts your garage door at your finger-tips . . . *while you sit in your car!* There's a tiny button on your dash. Touch it as you drive in. Then relax. *Silent Sound* carries on from there. Your garage door rolls open. The garage lights flood on. In seconds —danger, discomfort, inconvenience have been dispelled.

DOOR FULLY AUTOMATIC!

Inside, touch a button on the wall. The door closes *and locks,* the lights snap off.

And that's only *half* of it! Driving out, the wall switch opens the door, turns on the lights. As you back down the drive, your dash button closes and locks the door, turns off the lights.

How does it work? Simple! A tiny "Soundcaster" tucks under the hood of your car, plugs into your car's vacuum system. Touch the button and it directs a "beam" of ultrasonic waves at a microphone above your garage door.

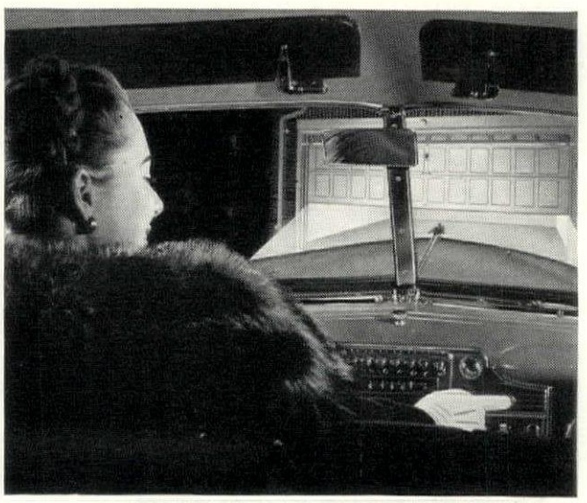
SOUND BECOMES ELECTRICITY

An electronic control converts the inaudible sound into electrical energy to raise or lower the door, turn lights on or off. That's all there is to it!

Because AUTOSONIC uses only a beam of sound to connect the car and the garage, there are no buried switches . . . in fact, no digging at all! There's no outside wiring. No unsightly posts. No "electric eyes".

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A BUTTON ON YOUR DASH sends your garage door rolling open, turns on the garage lights as you approach. The same button closes and locks the door, snaps the lights off as you back out.

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LETTERS



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I venture to predict that this issue will have more professional man-hours spent on it than any issue you have published to date.

ROBINSON NEWCOMB
President's Council of Economic Advisers

Washington, D. C.

Forum:

No question about it, the November issue is vibrant and virile, two attributes acceptable in almost anything.

I took the time to do a good deal of reading as well as looking through the issue. It occurs to me that perhaps there is an effort to cover too much ground at one fell swoop. Each and every facet of architecture of which you write is interesting and important—but I'm not sure that as a reader I would not prefer that each issue take up an individual subject and show its application in greater detail. Also—and regard this as a warning light—I have regarded the arrival of FORUM as a means of keeping me posted as to what goes on in architecture. Don't let this "keyhole on the world of building" get so erudite that it ceases to perform the simple yet important functions that it has so admirably fulfilled all these years.

HENRY DREYFUSS

Pasadena, Calif.

Forum:

. . . Thinking that I would know most of what I would read, I found things worth knowing that I did not know.

The issue as a whole is sober, accurate, good. No one in architecture should know less than you have outlined on heat, light, sound, atmosphere, structure. No one should understand less than what you say on esthetics. In looking, we see that few know as much, that most understand less.

As the number of the knowing, the amount of the understanding increases, machines and standards will be made to suit their purposes. Meanwhile,

". . . *each venture*
Is a new beginning, a raid on the inarticulate
With shabby equipment always deteriorating
In the general mess of imprecision of feeling,
Undisciplined squads of emotion."
(—EAST COKER: T. S. Eliot)

PAUL SCHWEIKHER

Roselle, Ill.

Forum:

. . . The amount of basic factual information that you have assembled is proof that

(Continued on page 38)



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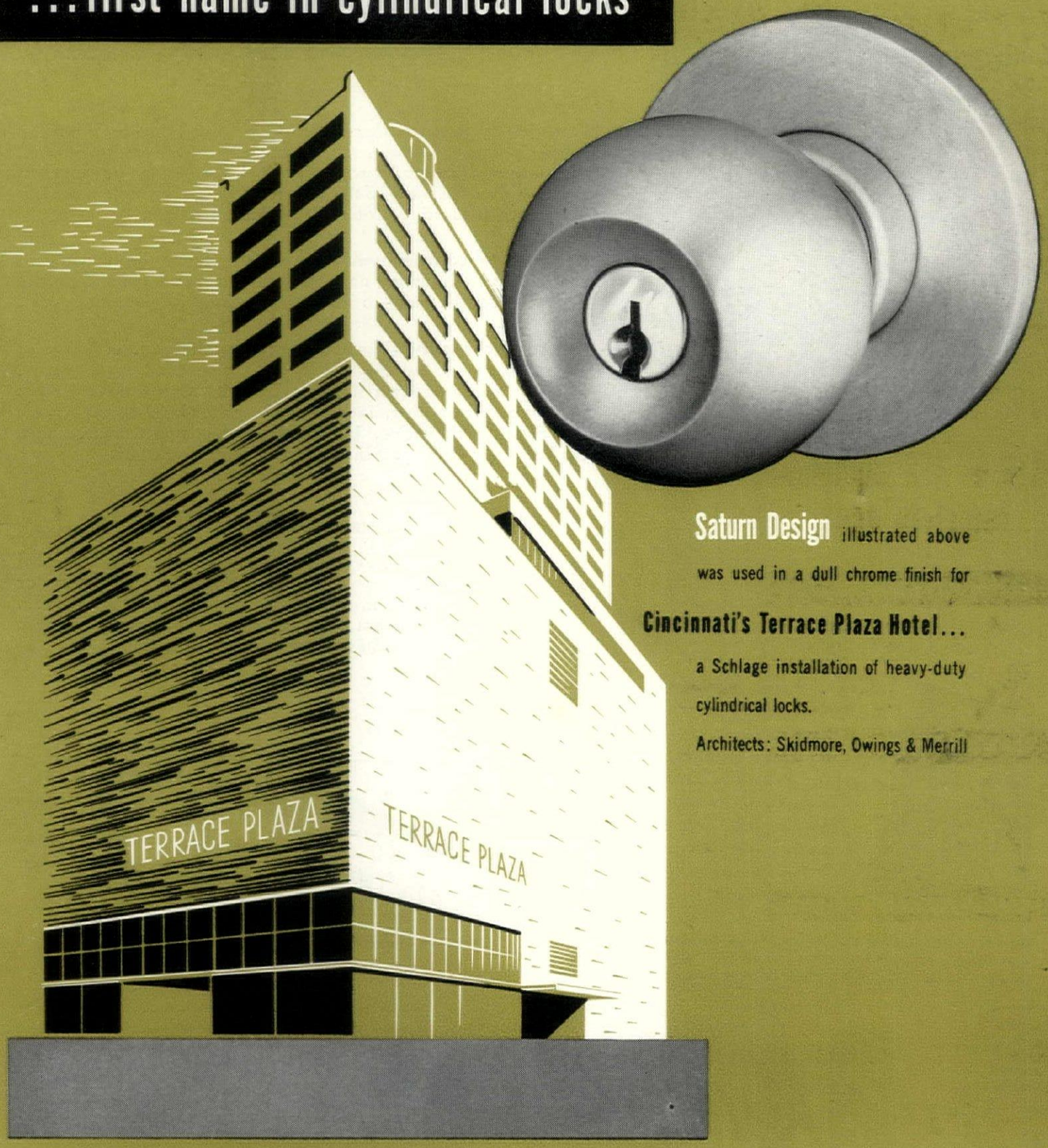
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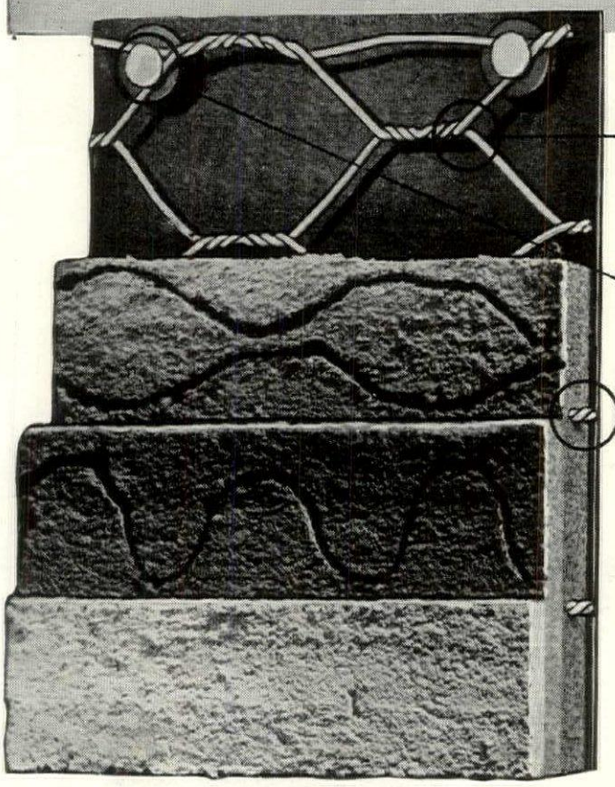
Saturn Design illustrated above was used in a dull chrome finish for **Cincinnati's Terrace Plaza Hotel...** a Schlage installation of heavy-duty cylindrical locks.

Architects: Skidmore, Owings & Merrill

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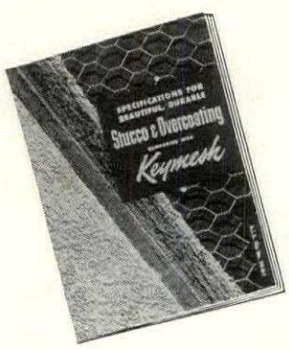
Provides stronger reinforcement—Keymesh is made of strong, copper-bearing steel wire. It is specially woven with a reverse twist—Keymesh lays flat when unrolled. No bumps or bulges to cause uneven thickness of the "scratch" coat. Keymesh is heavily galvanized for lasting protection against corrosion.

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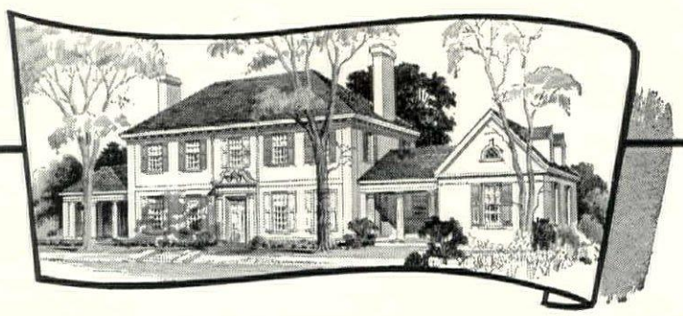
Keymesh-Reinforced Stucco is Good Construction

Portland Cement Stucco, reinforced with Keymesh, is the practical answer to beautiful, durable exteriors, either for new homes or remodeling. Keymesh insures stucco that remains beautiful . . . stucco that has permanent crack-resistance. For lasting strength and beauty, specify Keymesh on your next stucco job.

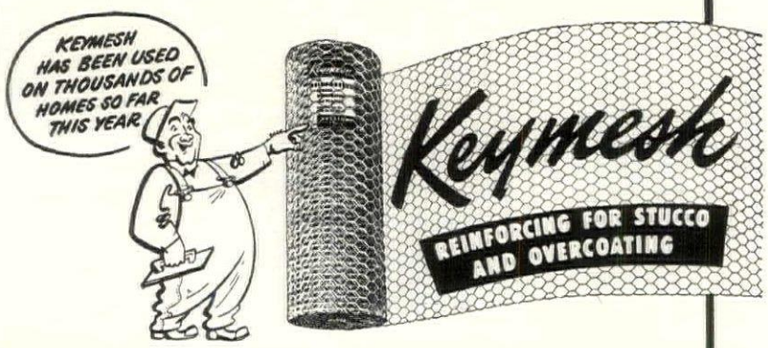


Every architect should have a copy of the new booklet "Specifications For Beautiful, Durable Stucco and Overcoating Reinforced With Keymesh". It's filled with facts of interest—write for your copy today.

Keymesh is shipped in rolls 150′ long by 3′ wide. For stucco and overcoating, specify Keymesh 1½″ hexagon mesh, 17-gauge steel wire, or 1″ hexagon mesh, 18-gauge steel wire. *Both are galvanized.*



TYPICAL GEORGIAN DESIGN
One of the design styles that Architects feel is most appropriate for the use of reinforced stucco.



• Architects interviewed in a recent national survey agree that more stucco will be used on more homes in the future. They consider modern steel-reinforced stucco a strong, durable siding material. And they also feel that stucco lends itself to modern and traditional design—that it is highly appropriate for today's popular home design styles, such as Modern, Ranch-Type, Cape Cod, Colonial and Georgian.

KEYSTONE STEEL & WIRE COMPANY
PEORIA, ILLINOIS

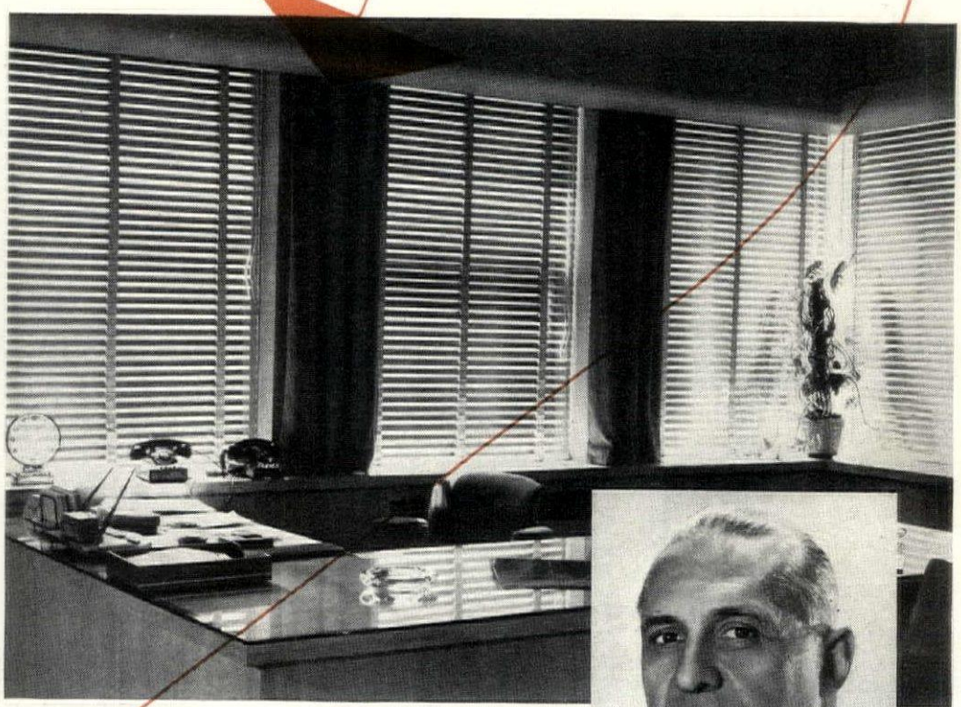
LEVOLOR

Reg. Trade Mark of Lorentzen Hardware Mfg. Corp

SPECIFIED HERE



Universal Pictures Building
Builders and owners:
Tishman Realty and Construction Co., Inc.
Architects: Kahn and Jacobs



"...meets the demands of discriminating tenants"

says David Tishman, President,
Tishman Realty and Construction Co., Inc.

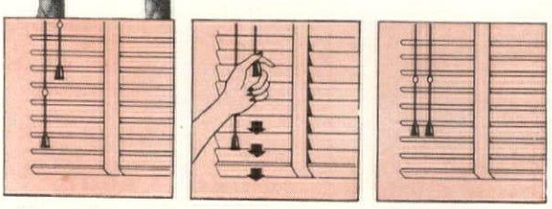
Top-ranking corporations that occupy this truly magnificent and modern office building at 445 Park Avenue, New York City, receive the very best performance from Venetian blinds. Why? Because the Tishman Realty and Construction Co., Inc.—outstanding New York Realtors and Builders for more than half a century—specified LEVOLOR self-adjusting tilters. LEVOLOR insures smooth-working blinds—cords always within reach, cords always even—the efficiency demanded by discriminating tenants.

This building is only one of many where LEVOLOR makes Venetian blinds WORK as well as they LOOK. Architects, builders, designers now know that truly modern Venetian blinds call for LEVOLOR . . . Specify LEVOLOR-fitted blinds the next time you order Venetian blinds. For a list of manufacturers in your area qualified to supply LEVOLOR for either new or remodeled blinds, write to us. LEVOLOR is the registered trade mark for self-adjusting tilters made by Lorentzen Hardware Mfg. Corp., New York 12, N. Y. and built into quality Venetian blinds by hundreds of manufacturers.



LEVOLOR is a rare achievement in Venetian Blind Hardware. It combines the sturdiest wrought steel for long, dependable service plus contrasting metals where needed to eliminate "freezing"..."sticking" and "jamming"

"Tilt gear to automatically keep cords level, shall be LEVOLOR as manufactured by the Lorentzen Hardware Mfg. Corp. or approved equal." Quoted from specifications of American Hotel Association.

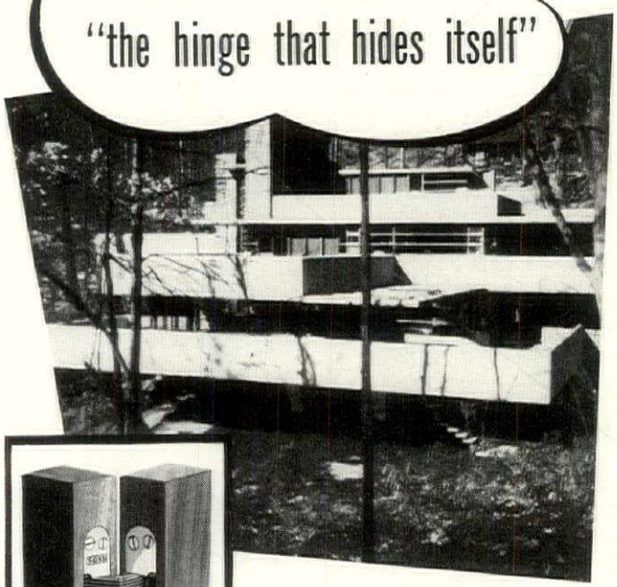


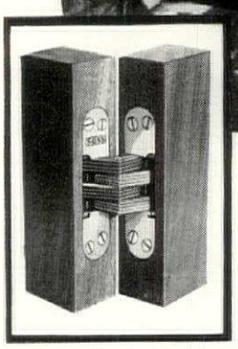
When tilt-cords "creep" . . just PULL the *short* cord . and "CLICK!" they come back even

LORENTZEN HARDWARE MFG. CORP., 391 W. BROADWAY, NEW YORK 12, N. Y.

LETTERS

equipped with
SOSS INVISIBLE HINGES
"the hinge that hides itself"





The home of Edgar J. Kaufmann at Bear Run, Pa.

This ultra-modern home, designed by a world famed architect, has had its beauty and distinctiveness of design enhanced by SOSS INVISIBLE HINGES. The hinges that have no protruding butt, as they are mortised in the door—completely hidden from view.

These remarkable SOSS HINGES allowed the architect to carry through to the most minute detail the spirit of modern architecture. For SOSS HINGES assured him of the flush, smooth, streamlined interior surfaces that would so harmonize with the overall design as to produce an everlasting symphony of architectural beauty.

There's a weight-rated SOSS HINGE for every type of installation. Whether it's a small cupboard door or the heaviest entrance door, you can be assured there's a SOSS HINGE, operating on hardened steel roller bearings, ready to do that particular job.

All SOSS HINGES are manufactured from only the finest of materials. The hardened steel roller bearings assure long life and ease of operation. All pins are made of special analysis hard drawn steel. All links are special heat treated steel. Body sections are cast from special zinc alloy with a tensile strength of 47,000 pounds per square inch.

Write for FREE CATALOGUE that gives complete details, blue print templates, and the many uses of this modern hinge to—

SOSS Invisible HINGES

SOSS MANUFACTURING COMPANY
21779 HOOVER ROAD • DETROIT 13, MICHIGAN

"no man is trained to be master of so much technology, but the man who is truly ignorant is the man who concentrates on only his specialty, and tolerates the others." To me, the value of your book is just that. It has forcibly underscored with words and pictures a fact that has become increasingly apparent to all of us.

In publishing and distributing to your subscribers a basic textbook of the technology of building at this date you have of course made it impossible for them to quickly thumb through and then file this issue with the rest of the magazines; and I for one would like to have you publish it in a more permanent form so that it could become part of the working library rather than the magazine plate file.

I think it the very best FORUM issue that has come out to date and it is a strong counterbalancing force to the rather high flown art and architecture books that have appeared recently.

HARRIS ARMSTRONG

Kirkwood, Mo.

SHEATHING

Forum:

. . . In "What America Needs," (FORUM, Nov., '48, p. 13) you have used National Homes Corp. as an example.

It is true that these people have already produced thousands of homes. Probably 13,500 represents a reasonably accurate figure. Believe it is also true that they use cotton insulation.

But it is not true that these houses are assembled from *plywood* panels as the exclusive material which your article would lead readers to believe. Plywood panels are merely used as a sheathing material, and in all these homes Upson Full Wall Strong-Bilt Panels are used on both walls and ceilings.

In fact, the picture that you display in your article could never be of plywood construction because plywood is only available in 4 ft. width and these two walls which are shown in the picture are a material that "covers the entire wall from floor to ceiling and from corner to corner." That material is Upson Full Wall Strong-Bilt Panel. . . .

H. R. SHEDD
The Upson Co

Lockport, N. Y.

LEGALISTIC PHRASEOLOGY

Forum:

Please accept my sincere congratulations on your unusually complete description of the recently opened Terrace Plaza Hotel in Cincinnati. Although we may be slightly biased since we have a great interest in the

(Continued on page 42)

Facts you'll want to know about

Cabot's Paints



Dubin & Dubin, Architects

1 A color for every design! *Cabot's Collopakes offer an amazingly wide selection of 32 attractive colors.*

2 Cabot's Collopakes retain their lively colors — look fresh and bright for years.

No fillers or adulterants are used.

3 Cabot's Collopakes have tremendous hiding power, produce a durable, procelain-smooth surface.

The pigments in Cabot's Collopakes are reduced — by the unique, patented Collopaking process — to particles many times as fine as in ordinary paints. These particles are colloidally dispersed in the vehicle.

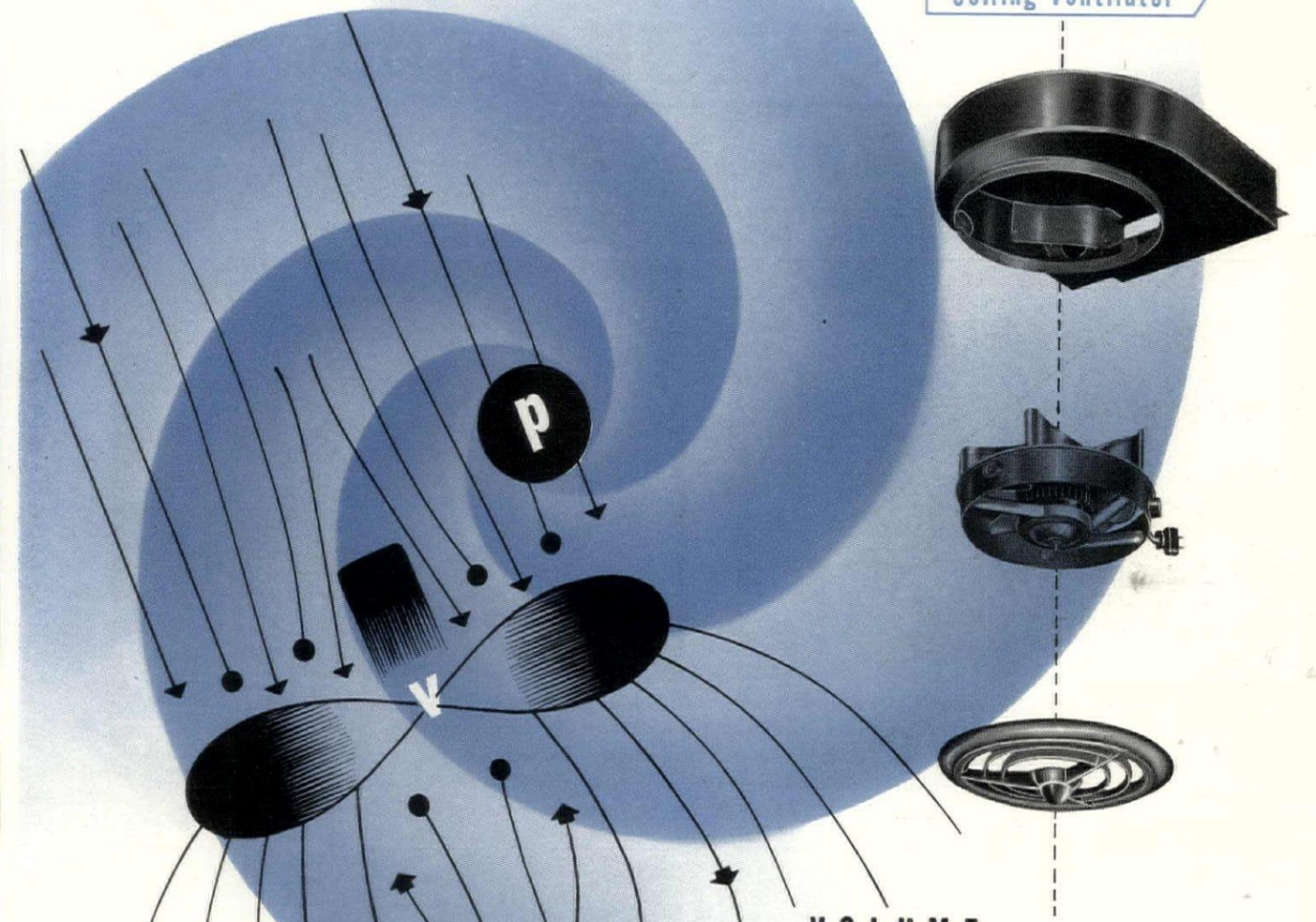
see these beautiful shades

Write for new color card with complete information including suggested color combinations.

Samuel Cabot, Inc.
223 Oliver Bldg., Boston 9, Mass.

volume + power = Blo-Fan

Electric
Ceiling Ventilator



VOLUME

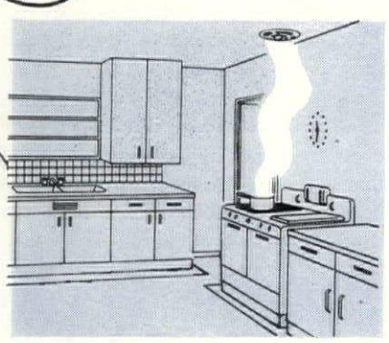
A propeller (breeze fan) blade delivers volume, BUT, – when it meets resistance – it lacks power.

POWER

A blower (squirrel cage) delivers power, BUT – at moderate speeds – it lacks volume.

Blo-Fan

Combines only the positive principles of both fan and blower. The propeller element feeds air to the blower element, thus minimizing "shock loss" of the average blower. That's why Blo-Fan delivers more air at moderate speeds than either a blower or propeller type ventilator.



Another Pryne service for your clients is our free booklet "Danger Spots in the Home" which will be supplied in quantity upon your request.

Blo-Fan INSTALLS OVER THE RANGE – WHERE A FAN BELONGS. IN THE CEILING OR AN INSIDE WALL.

PRYNE & CO., INC. POMONA, CALIFORNIA—LOS ANGELES—SAN FRANCISCO—CHICAGO—NEW YORK

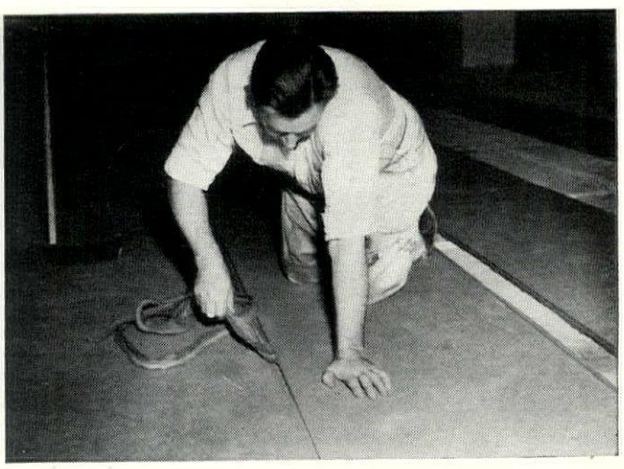
STOCKED IN 300 CITIES BY 500 FRANCHISED DISTRIBUTORS

Watch the amazing new CUSHIONLOK go down!

See why Bigelow's special rubber-base carpet is ideally suited to your need!



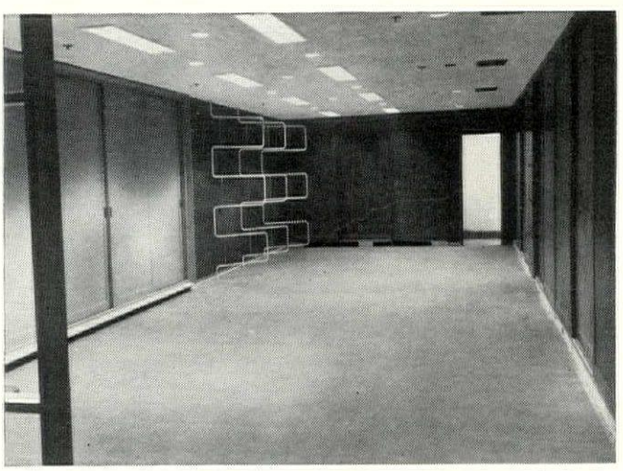
At last—the perfect commercial carpet! *Cushionlok* combines thick wool carpeting (in the famous-for-wear Gropoint weave) with a built-in sponge rubber back. As shown, it requires no preliminary preparation—can be laid directly on bare concrete, linoleum, wood or plywood!



Lasting good looks—luxurious feel! *Cushionlok* comes with a special Trimeasy edge which strips off quickly, leaving neat edges that meet almost invisibly. Deep sponge rubber base insulates against shock, assures longer wear. *Cushionlok* is rich and springy to walk on; also silences noise!



Installed with little inconvenience! An installation of *Cushionlok* can be completed with speed never before possible. *Cushionlok* comes in 27" width—ties up only a fraction of floor space, requires little disturbance of furniture. Cement grips floor at once; carpet can be walked on as soon as laid.



A real investment in beauty and wear! *Cushionlok's* Gropoint surface resists soiling, shading, traffic lanes. Tests show *Cushionlok's* rubber back resists deterioration for decades. No separate lining—lower labor charges! Increased wear and permanent luxury make for real long-range economy!

Plan your Cushionlok installation! Consult Bigelow's Carpet Counsel. What's *your* carpeting need? Store, Hotel, Office? New *Cushionlok* is ideal for many commercial uses. One of our 26 Carpet Counsel Offices will help you plan your installation . . . supervise the job from color-choosing to finish. Call us today.

Bigelow

Rugs and Carpets

Beauty You Can See . . . Quality You Can Trust . . . Since 1825



Something to CROW ABOUT!



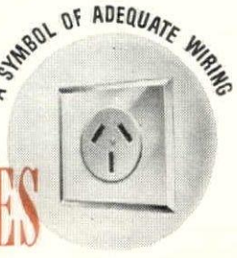
Provide for modern Electric Ranges in the houses you design and build, and you'll really have something to crow about! The facts show that your customers will want Electric Cooking. Another million American families switched to it last year. Conservative estimates indicate that the same thing will happen again this year.

So build houses that are modern today and will stay modern for years to come. During construction, include wiring for an Electric Range, leading to a range outlet in the kitchen. An Electric Range, like electricity itself, is now a "must" in every modern home!

ELECTRIC RANGE SECTION, National Electrical Manufacturers Association, 155 East 44th Street, New York 17, N. Y.

ADMIRAL • COOLERATOR • CROSLEY • ESTATE HEATROLA • FRIGIDAIRE • GENERAL ELECTRIC • GIBSON
HOTPOINT • KELVINATOR • LEDO • MONARCH • NORGE • QUALITY • UNIVERSAL • WESTINGHOUSE

Follow the trend... **wire YOUR HOUSES FOR ELECTRIC RANGES**



Another 1,000,000 American families switched to Electric Cooking last year

LETTERS

property, I feel that you are doing the profession a marked service in presenting so adequately the unique features and modern design of this highly functional building.

However, I cannot resist the temptation to chide you. Like so many of the general public, you apparently became bewildered by the "mortgagors" and "mortgagees" of legalistic phraseology. Your story refers to the Prudential as the mortgagor whereas we are the mortgagee! It is incidentally, a position far more befitting an institution such as the Prudential.

Actually no inference can be drawn from the contract interest rate which we consider low! The mortgage loan which we made to Thomas Emery's Sons, Inc., covers a number of Cincinnati properties owned by this corporation, not the Terrace Plaza alone. The low interest rate merely reflects our confidence in the city, the properties, and the ownership and management involved.

You also suggest that Prudential might have been influenced by the "novelty of design." We have no objection to functional or "modern" construction either from the standpoint of appearance or originality as should be indicated by our new Western Home Office, just completed in Los Angeles. This ten-story structure, designed by Wurdeman & Becket, is not only contemporary in design but embraces a number of novel construction features.

CHARLES FLEETWOOD
Prudential Insurance Co.
Newark, N. Y.

Forum:

. . . I believe the Prudential Insurance Co., in this case, would be considered the mortgagee and not the mortgagor. . . .

W. GEORGE BOWRING
Milwaukee, Wis.

Thankee—ED.

EQUITABLE BUILDING

Forum:

. . . In the article "Skyscrapers Ahead," (FORUM, Sept., '48) you stated the new 12-story Equitable building was in Seattle. I forgave you for this error. But in the November issue, page 138, you did it again! The new *Equitable Savings & Loan* building . . . is located on Sixth Avenue, between Washington and Stark Streets, Portland, Ore.

WALTER G. BROWN, JR.
Portland, Ore.

Forum:

In your November issue . . . you show a picture of our building and the copy says "Equitable Savings & Loan Co. building,

(Continued on page 46)

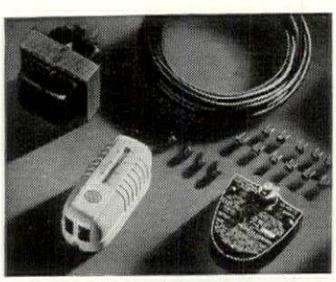


You'll build homes for less and offer owners better values with today's modern, lower cost, more economical vaporizing oil burning furnaces and floor furnaces. Then be sure they're equipped with A-P OILIFTERS and A-P THERMOSTAT COMFORT CONTROLS for COMPLETELY AUTOMATIC HEATING CONVENIENCE.



A-P OILIFTER "Lifts" oil from outdoor tank

With an A-P OILIFTER, you can install bulk storage tank outdoors, out of the way, saving space for "living" area in compact homes. The OILIFTER feeds oil to the furnace as required, using only a single thin copper tube. Your customers benefit by bulk oil delivery, and more economical heat.

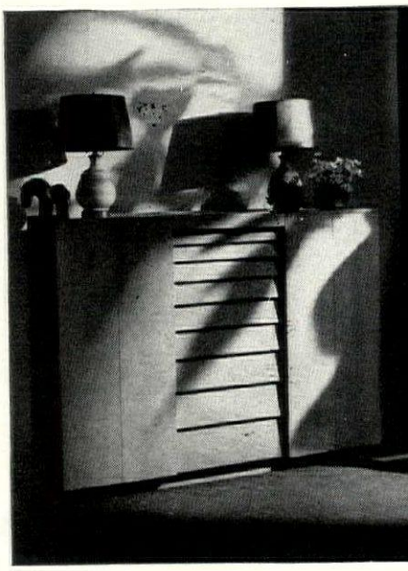


A-P THERMOSTAT COMFORT CONTROL

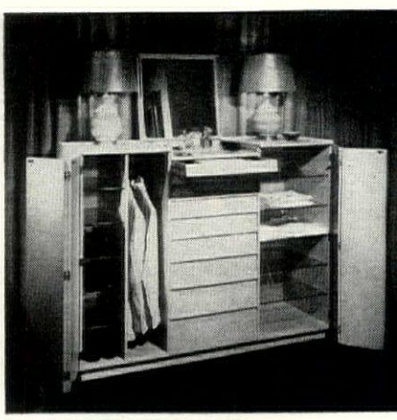
Adding the convenience of Automatic Temperature Regulation, this A-P Thermostat Comfort Kit saves oil, avoids overheating, assures more uniform, healthful and comfortable home temperatures. Standard on many furnaces.

Write today for your copy of the "A-P Album of Famous Vaporizing Oil Burning Appliances."

AUTOMATIC PRODUCTS COMPANY
2530 NORTH THIRTY-SECOND STREET
MILWAUKEE 10, WISCONSIN
DEPENDABLE *Oil Controls*
designed to eliminate servicing



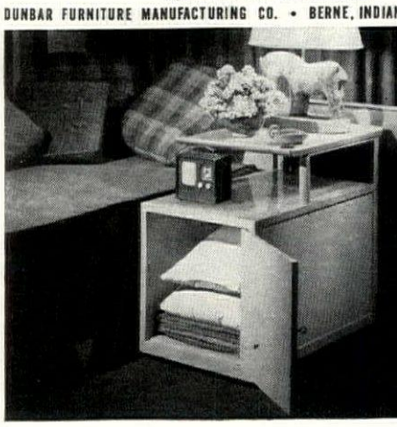
DUNBAR
for Modern

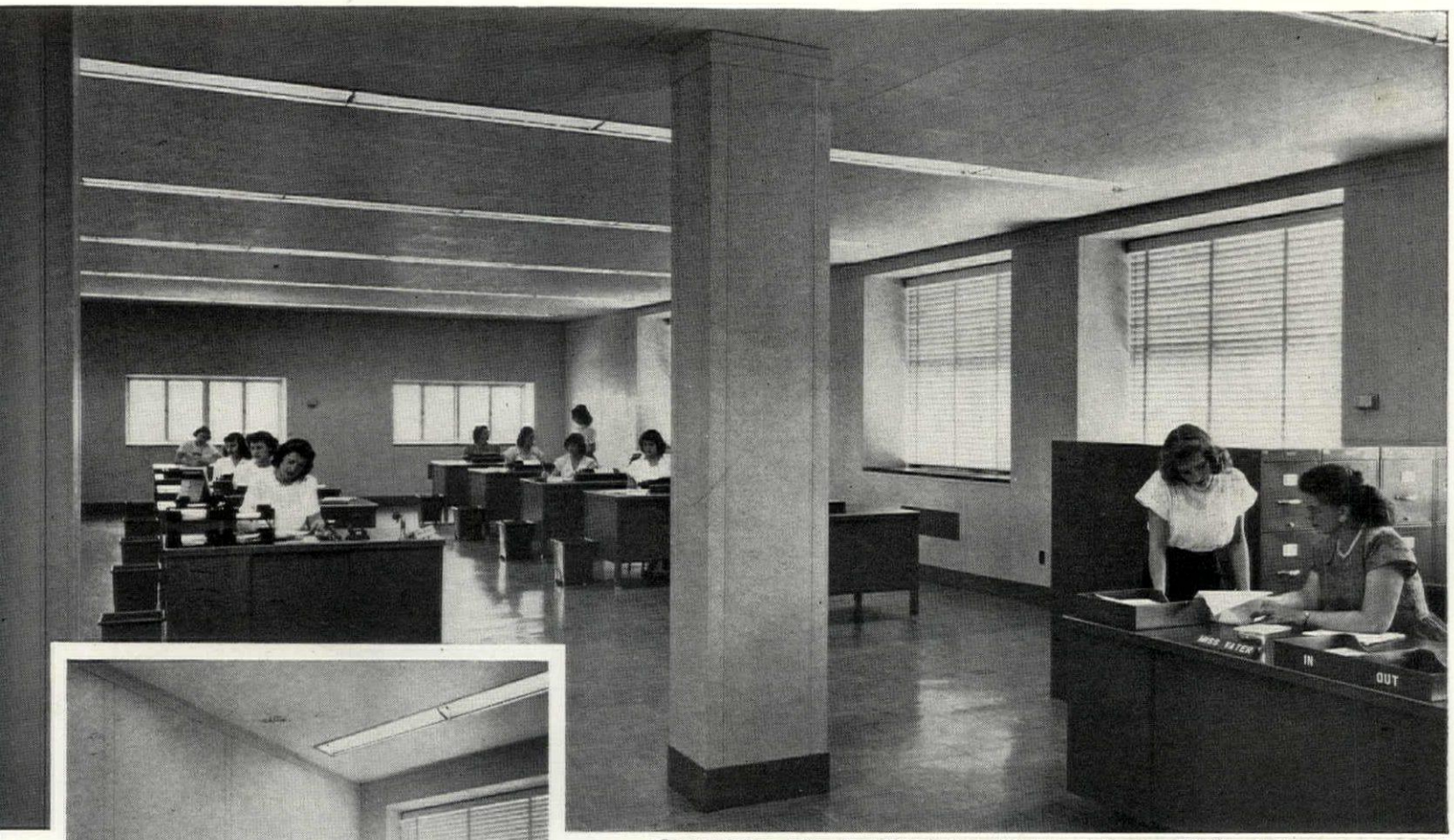


Modern pieces of maximum utility. Chest features a wardrobe section, a series of canted drawers and adjustable glass shelves. The night table provides storage space for bedding.

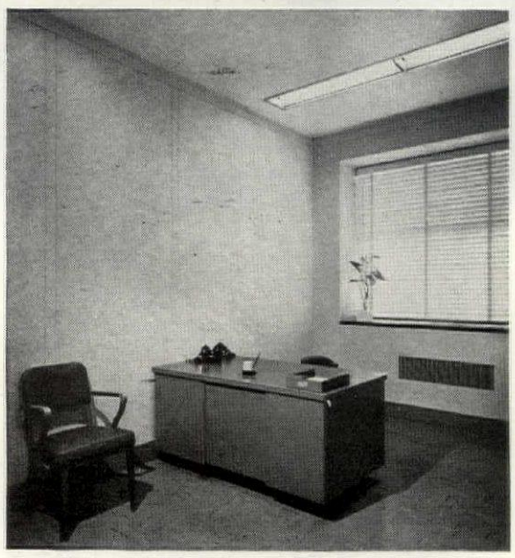
Send 25 cents for 28-page profusely illustrated booklet packed with Modern decorating ideas.

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BOSTON: 203 Clarendon Street
KANSAS CITY: 608 Merchandise Ma
NEW YORK: 227 East 56 Street
DUNBAR FURNITURE MANUFACTURING CO. • BERNE, INDIA

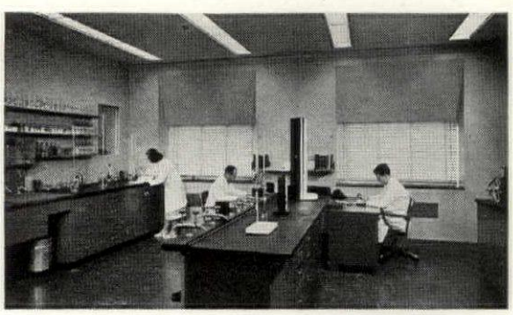




General Offices at Standard Oil Company of Indiana Laboratory, Whiting, Indiana
Holabird & Root & Burgee, Architects and Engineers



At Standard Oil Company of Indiana Laboratory, Hauserman All-Steel Interiors provide pleasant and comfortable environments for executive offices.



Hauserman Movable Steel Partitions provide flexibility that is essential to the changing requirements of research at Standard Oil Company of Indiana Laboratory.

Rock-bottom Maintenance Costs

plus MOVABILITY

Hauserman *All-Steel* Interiors won't chip, crack, warp or scale. They save thousands of dollars by eliminating the need for patching and repainting walls. The rich decorators' colors and authentic wood grain reproductions are baked-on and last a lifetime with ordinary washing.

Hauserman *All-Steel* Interiors also assure efficient utilization of all floor areas for the life of the building. Hauserman *Movable* Steel Partitions are quickly and easily moved whenever new floor layouts will promote operational efficiencies . . . often in a matter of hours. Whenever Hauserman Partition changes are made, all units are completely re-used.

There are many reasons why Hauserman *All-Steel* Interiors are used in the smaller as well as the largest buildings in America. Among these advantages are: Rich, Decorators' Colors and Authentic Wood Grain Reproductions • Rigid Construction • Excellent Sound Control • Earlier Occupancy • Incombustible Materials • Ease of Adding Wires and Outlets • Ease of Servicing Utilities • Rock-bottom Maintenance Costs • Movability, as exemplified in the efficientlv designed Standard Oil Company of Indiana Laboratory shown here.

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Specialists In Service—We assume undivided responsibility for complete interiors . . . shop drawings, building measurements and installation. We supply all products complete with hardware, wiring raceways and all other accessories. Our experienced erection crews are on call for alterations and additions. Our engineers are always at your service.



FREE CATALOG TO HELP YOU PLAN

You'll find interiors to meet your exact requirements in Hauserman Catalog 49. Write for it on your business letterhead today.

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ALL • STEEL INTERIORS

MOVABLE PARTITIONS • WAINSCOT • ACOUSTICAL CEILINGS

"For every commercial, industrial and institutional need"

FOR LEAKPROOF, TROUBLE-FREE PIPE RUNS



Cut-a-way view of a Walseal Tee showing ring of silver brazed alloy, and completed Silbraz joint.

Specify Walseal* Products

On all types of piping jobs where Type "B" copper or red brass pipe is used, trouble can be avoided by installing Silbraz* joints — made with Walseal valves, fittings and flanges.

Threadless, patented Silbraz joints are silver brazed (not soft soldered) pipe joints that are leakproof, trouble-free — permanent ... connections that will not creep or pull apart; that literally join with the piping system to form a "one-piece pipe line". Thus, these modern joints eliminate the need for maintenance and costly repairs — especially important where lowered operating costs are imperative.

For complete details on the modern Silbraz joint, made with Walseal products, write for a copy of Walworth Circular 84.

**Patented — Reg. U. S. Patent Office.*

Recommended for

- **Hot and Cold Water Circulating Systems**
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Make it a "one-piece pipe line" with WALSEAL

WALWORTH

valves and fittings

60 EAST 42nd STREET, NEW YORK 17, N. Y.

DISTRIBUTORS IN PRINCIPAL CENTERS THROUGHOUT THE WORLD

here's a house full of ideas:

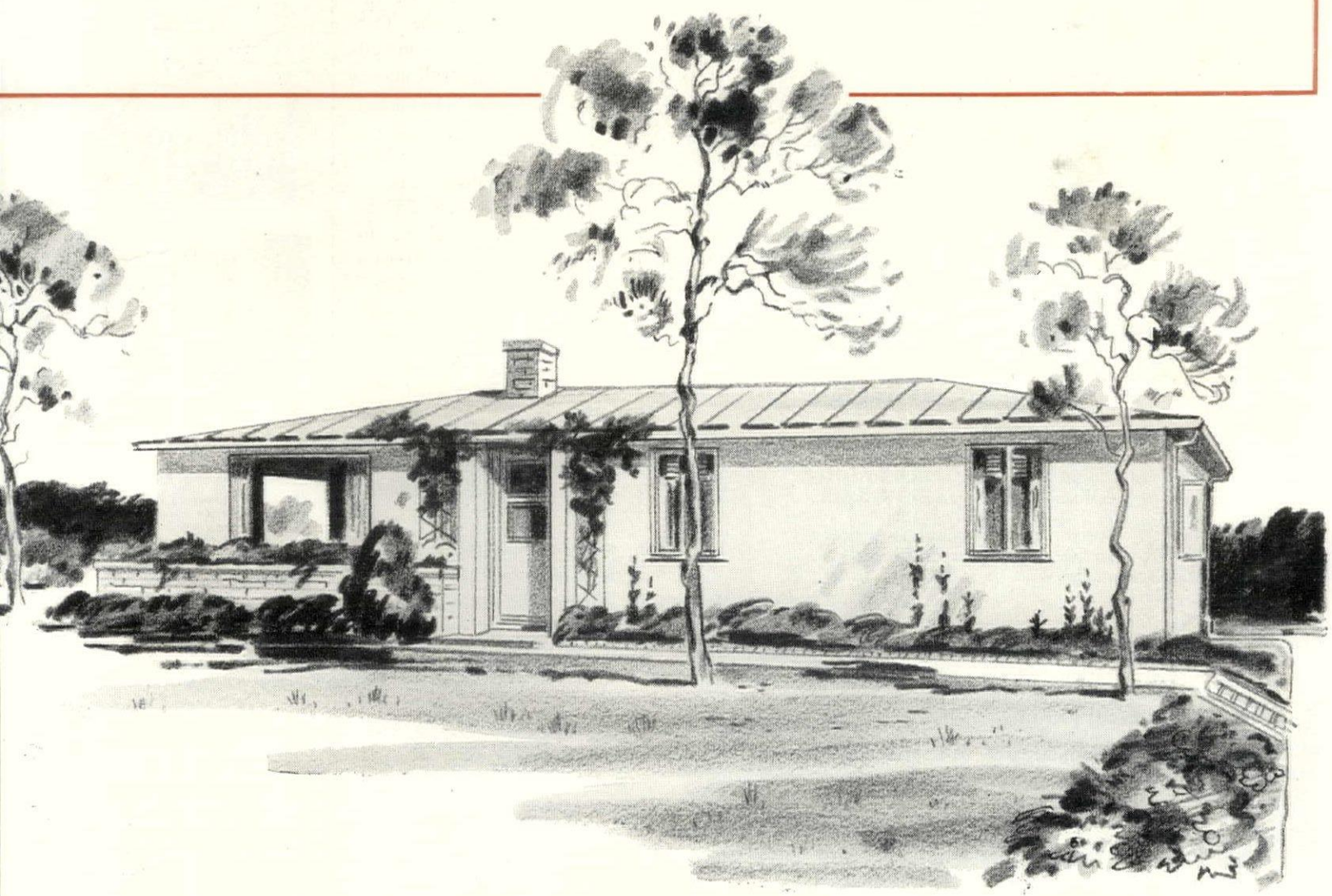
Alcoa's newest laboratory works 24 hours a day

This home in a residential section of New Kensington, Pa., is Alcoa's newest laboratory. The family living in it are also Alcoa research workers.

Here we hope to find the answers to many new approaches to building *and living* with aluminum. Designed by Alcoa architects and engineers, this new home embodies over 60 different aluminum applications . . . load bearing exterior wall panels, insulation, hardware, wiring, doors and windows, to name a few.

These applications have proved out in laboratory tests. Now we want to find out how these new uses stand the test of being lived in, through summers and winters, celebrations and quiet evenings at home, under the impact of storms, velocipedes and birthday parties for five year olds.

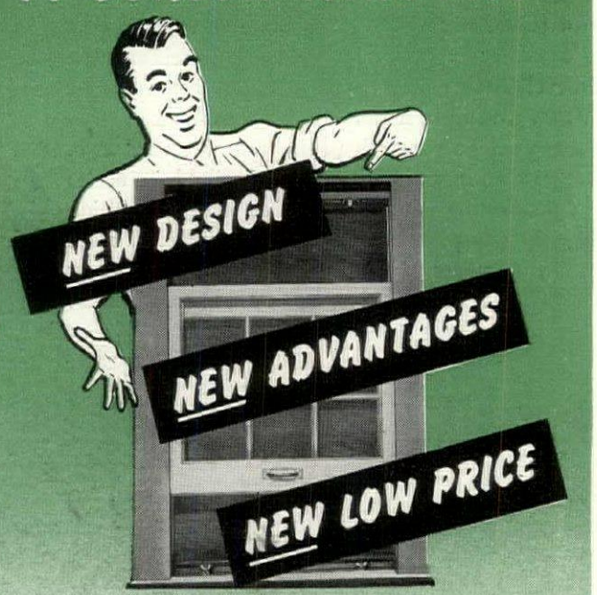
As we find out the answers, good or bad, we will tell you about them. We don't expect architects to risk their reputations and their clients' money on proving out new ideas in aluminum. That, we think, is our job. This residence is one example of many Alcoa research projects now under way. Today, although aluminum is not readily available in all its forms, we are proceeding with dozens of experiments which we hope will help you plan better, more economical, more livable homes in the years to come. ALUMINUM COMPANY OF AMERICA, 1866 Gulf Building, Pittsburgh 19, Pennsylvania.



ALCOA REG. T. M. FIRST IN ALUMINUM

LETTERS

THERE'S A NEW WAY TO SCREEN WINDOWS



DURALL

ALUMINUM TENSION SCREEN

SPECIFY IT. . . the unique, *new* screen . . . *the* flexible, tension-designed screen with snap-catch installation and lifelong freedom from sagging—DURALL.

BUILD WITH IT. . . the screen that snaps into place in minutes—from inside (no ladder climbing!) . . . the revolutionary screen with *no side frames* to cut, fit or paint—DURALL.

SAVE WITH IT. . . the extra-economical screen that costs dollars less*, slashes "normal" installation bills, cuts maintenance, wipes out replacement costs . . . the durable aluminum screen that never rusts, stains, or needs painting.

DEMAND IT. . . this popular, easy-to-handle screen you can leave up the year around or roll up for compact storage . . . the ideal screen for any double-hung window—DURALL.

***Only $4.85 for the popular 28" x 54" size at retail.**

DURALL is sold through building supply and hardware channels. Send the coupon below for the attractive file size DURALL CATALOG with complete information.



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Seattle." In your September issue, you devoted the front cover and several pages to a complete study of our building, which is owned by Equitable Savings & Loan Association and the building is in Portland, Ore.

Your September issue is correct . . . the building is in Portland, Ore.

LESLIE PEYTON
Equitable Savings & Loan Assn.

Portland, Ore.

GERMAN REQUEST

Forum:

. . . We are a small group of German students of architecture attending the Institute of Technology of Karlsruhe. Our ages range from 21 to 26 years. We are all of us working our way through college.

Some time ago we became acquainted with a young American soldier, himself a student of architecture. In the course of a number of very interesting discussions on modern art and architecture in the U. S. and Netherlands he introduced us to FORUM. Though before the war Germany published a number of excellent architectural periodicals, none could compare with your publication; we were quite surprised about its diversity. Even looking through a few numbers, we were confronted with quite a number of new and interesting data and problems wholly unknown to us due to their failure of being published in the current German periodicals on architecture.

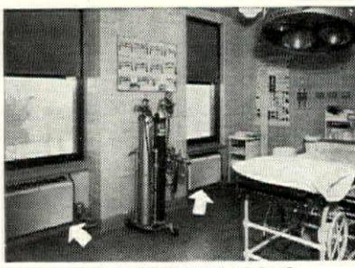
However, we would like to know more about these things and would like to catch up with the progress the world and especially the U. S. have made in this field during the past eight to ten years. It is for this reason we are turning to you, hoping that you will be able to help us. If you could let us have some of your back numbers covering the period since 1939 it would be of tremendous help to us, and we should be very grateful to you indeed. Perhaps we could show our appreciation by sending a similar consignment of German architectural literature to you for forwarding to a group of American students interested in what has been accomplished in Germany and in what is contemplated in the rebuilding of our cities.

DIETER DOEPFNER
and three others

Ladenburg a/Neckar, Germany

FORUM, which unfortunately has few back numbers at its disposal, submits Reader Doepfner's request to those readers who might be able to act on it.—ED.

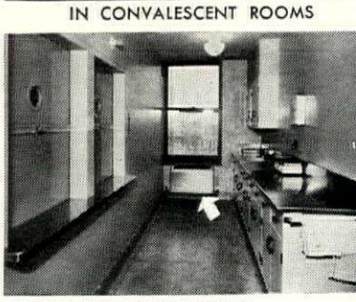
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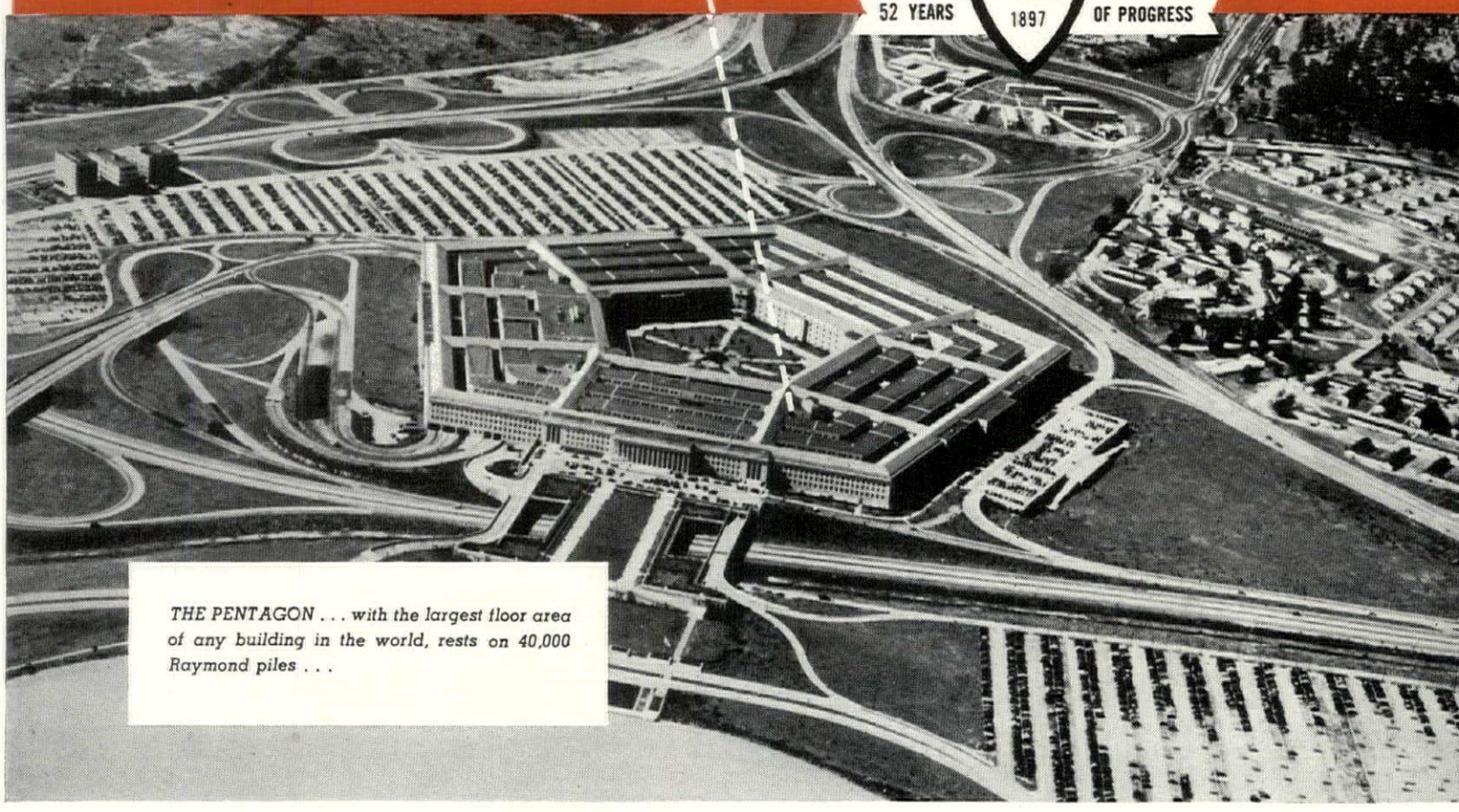
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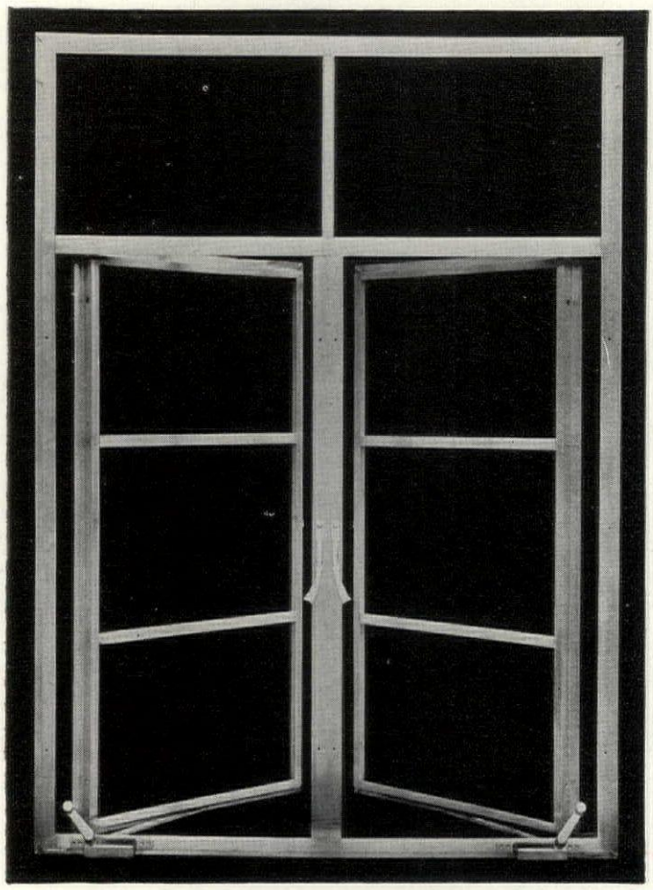
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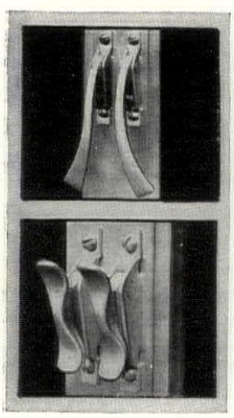
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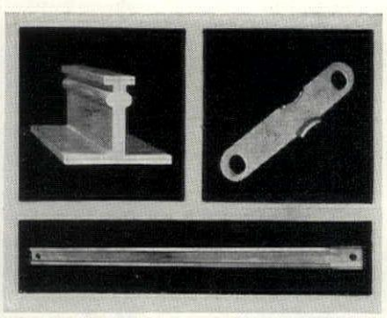
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The optional choice of butterfly type for use with venetian blinds or the standard cam locking handles gives you a freedom of choice.

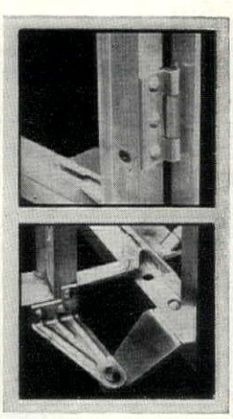


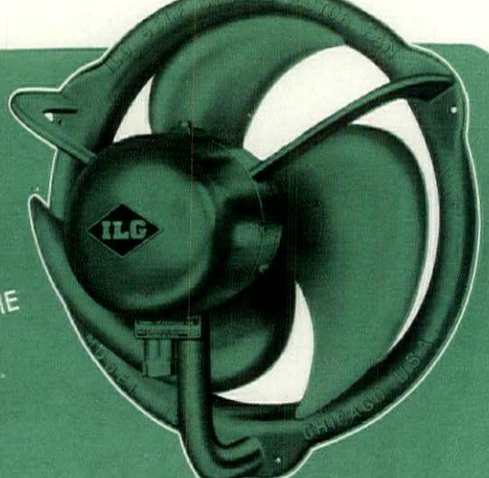
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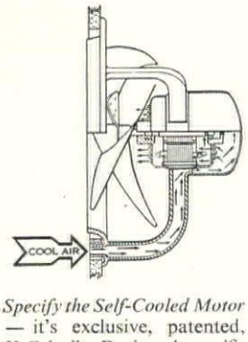


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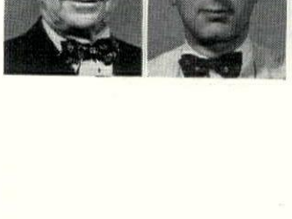
ELMER ASTLEFORD, photographer of Girard House in Grosse Point, Mi (p. 95), was born, raised and educated the midwestern plains. A native of Moines, Iowa, he studied architecture at University of Michigan, did architectu drafting for 23 years in nearby Detr After puttering with cameras in off-hours, decided in 1935 to merge vocation w avocation and opened his own photograp studio. He has devoted himself to archi tural photography in and around Det ever since.



RICHARD GARRISON hails from a sn town in Washington near the Canadian b der. He studied architecture at Washing State College and painting at Fontainebl then spent several years designing for C fornia and New York architects. emerged, along with the depression, in 1 as a professional photographer, closed studio ten years later for a four year hi in the Navy. A shortage of vacant stu in New York on his return forced him photograph completely "on location" 104). He now prefers that infinitely studio work.



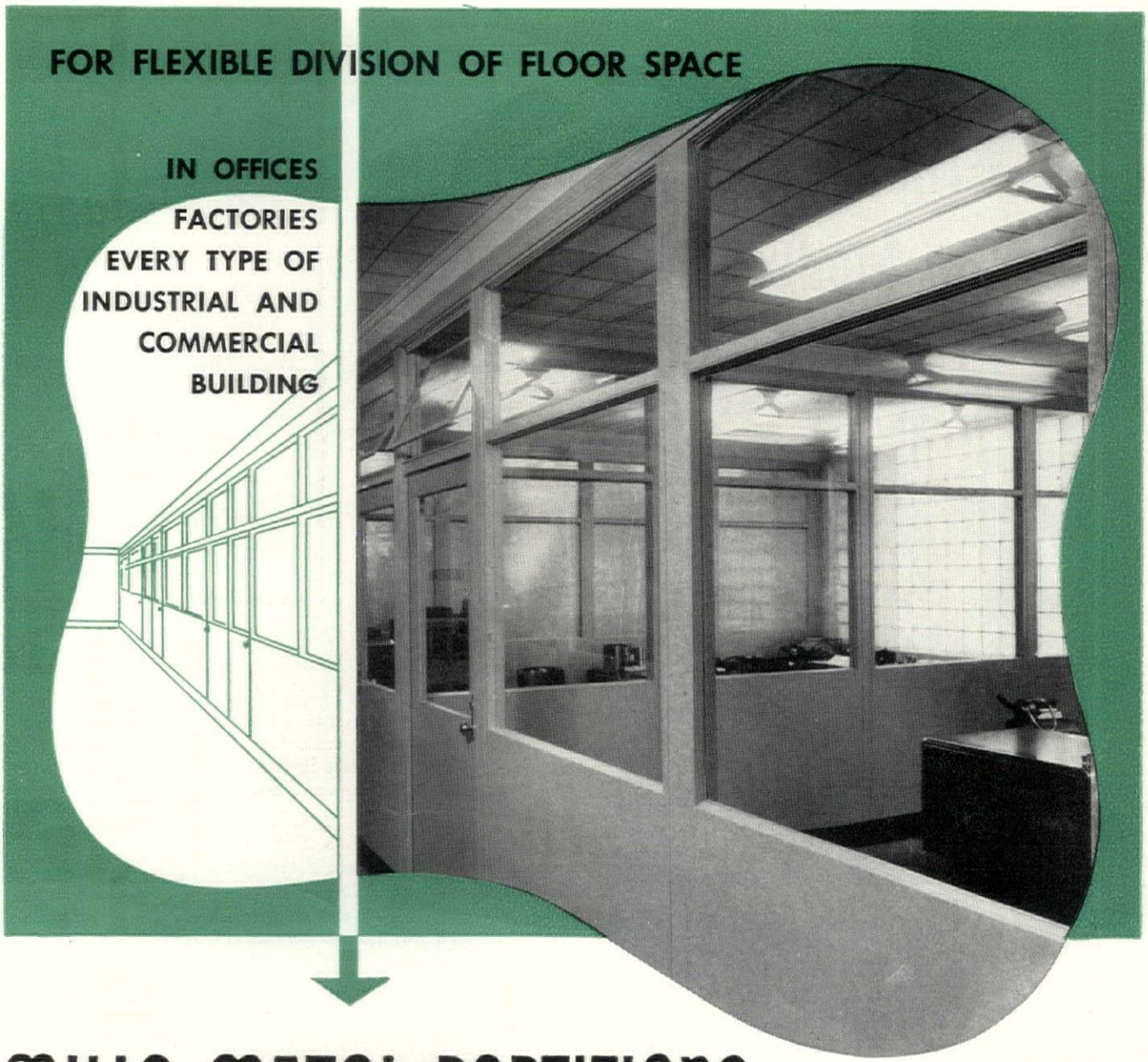
JULIUS SHULMAN, photographer of the erly-Carlton Hotel (p. 105), was born Brooklyn, moved to a Connecticut farm tender age, made his last big migration California in 1921. Photography was hobby until 1936 when Richard Neutra dered some snapshots Shulman had taken a Neutra-designed house. Thus begar career photographing contemporary des in California. Shulman hopes to com a "Guide Book to Southern California M ern Houses" similar to the Museum Modern Art's for the northeast.



SAMUEL H. GOTTSCHO, a phot rapher since 1896, has aimed camera at such famous buildi as Bertram Goodhue's Nebra State Capitol and Raym Hood's American Radiator Bu ing. **WILLIAM H. SCHLEISN** his partner, studied advertis at New York University, left t field to join Gottscho as lensm 14 years ago. As Gottscho-Schl ner, their main pursuit is ar tectural photography (p. 110)



BEN SCHNALL, photographer of New Yo Finland House (p. 115), is a commerc artist turned cameraman. A trip to Eur in 1929 and the casual purchase of an A encouraged him to try to emulate Steig and Steichen. Eventually he abandoned drawing board for full-time photogra with the statement: "This is much be than working." He does architectural industrial photography exclusively keeps his office a one-man operation, b behind the camera and in the darkroom.



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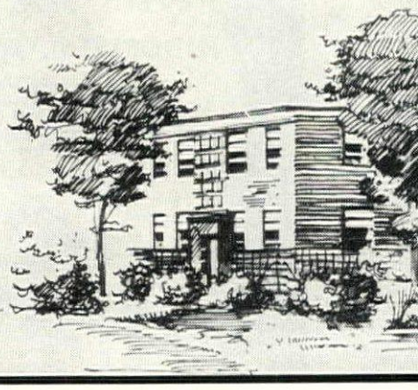
You'll find this new 44 page Mills Catalog bound into Sweet's File, Architectural, for 1949—or we'll be glad to send you an easy-to-handle copy for your individual use. Just ask for Catalog 49-O.

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MODERN FLOORING TECHNIQUES
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tile flooring prepared by leading architects and
building authorities for the information of the
architectual and building professions.
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The use of Asphalt Tile in Modern Multiple Housing Projects

By Edwin H. Mittelbusher, Architect

The design of a rental housing project is secondary only to the financing pattern. The selection of each and every detail of construction, and the selection of each and every material is influenced thereby. The physical security for long term loans, by that I mean 27 to 32 year loans, must fulfill certain fundamental requisites and standards, some of which are dictated to us by the lenders, others by the myriad of building ordinance, and still others imposed upon us by the future tenants themselves.

We arrive, eventually then, at an area or range within which we must design. It is necessary, in order to obtain a fair return, that both construction, operating, and maintenance costs be consistent with the rental income expectancy. The fullest possible advantage must be taken of all the factors involved.

In the 366 unit rental project now under construction in LaGrange Park, there is about 360,000 square feet of floor area or surface (not including basement laundry, storage and boiler room area).

These floors consist of a 2½" concrete slab poured in place over light weight steel beams. The choice of a floor covering for these concrete floors received our utmost attention for many months.

We are faced primarily with a maintenance problem. In addition to that, we were concerned with the original cost of installation or first cost.

In this project there are 32 garden type apartments, in which the floors are about 2'-0" below grade. A floor material, such as asphalt tile, resists moisture is required i units.

Then last but not least in tance was the matter of floo and its effect on the apartmer scheme. With these four ba fundamental requirements in we selected asphalt tile as t terial which would best ful satisfy every one of these sta and many more.

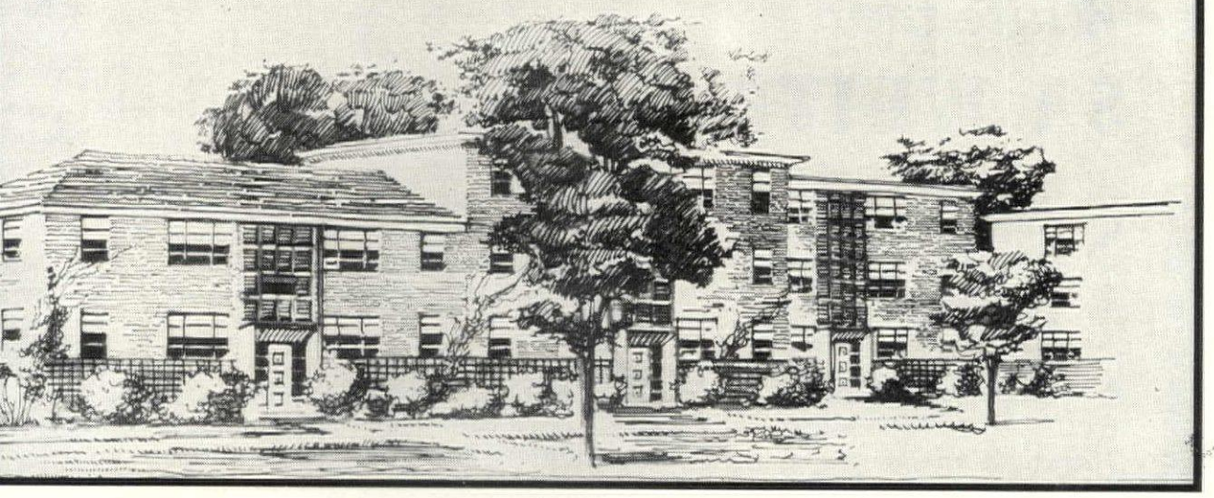
MAINTENANCE

Plain soap and water moppin it easily. The dirt is never ab into the material itself but s the surface where it is easy to r An occasional waxing will br the rich colors although this necessary. We chose Grea Asphalt Tile for the groun



Reading from left to right, Charles E. Joern, President of Wm. Joern & Sons, Builders; Edwin H. Mittelbusher, Architect; and Elmer M. Larson, General Supt. for Wm. Joern & Sons... one of many discussions concerning "The Homestead."

This is a typical unit in "The Homestead," La Grange, Illinois. The development consists of 19 of these two and three story buildings containing four and five room apartments.



ns because it is grease proof, seldom stains, and resists the ge of moisture. Replacement of comparatively simple if unfor- damage should occur in certain

LOW FIRST COST

lt Tile flooring is one of the t cost floor coverings available. preparation of the surface for ncrete sub-floor is a very simple tion consisting only of trowel- he concrete slabs to a smooth surface in preparation for the adhesive. The individual tiles hen be rapidly set in place, d and ready for use immediately fter. Apartments are ready for ancy in a matter of a few hours.

COLOR

ave selected a marbleized deep brown color for the living rooms and bedrooms, and a very light gray for the kitchen floors to harmonize with the cabinets and counter-tops. These floors will blend in with the drift-wood finish of the mill-work and the aluminum sash. These color schemes, being somewhat neutral, will give the tenants the maximum utility as well as the least problem insofar as blending in with their present or new furniture, rugs, draperies, etc., is concerned. These are very real considerations which definitely affect rentability and in our experience we have found that asphalt tile has received the general acclaim and acceptance required of floor coverings in this type of dwelling unit.

LONG WEAR AND LONG LIFE

When the matter of long life was given our attention, we examined asphalt tile floors that had been subjected to hard wear and traffic in stores and corridors for at least fifteen years. Upon close examination we came to the conclusion that this type of floor was practically "wear-proof."

RESILIENCY AND COMFORT

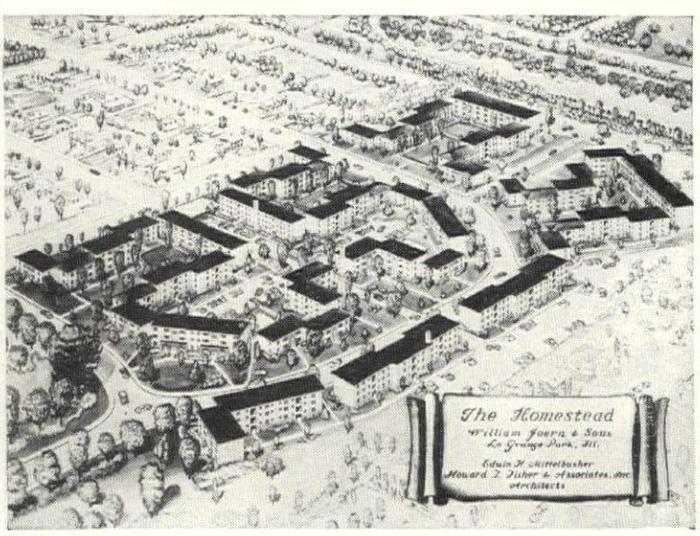
Figures indicate that the average housewife walks 25 miles per year making beds. This means that unless the floor is extremely resilient and comfortable, she wouldn't have enough energy left to complete the remaining household duties required of her. Asphalt tile is unusually resilient and less fatiguing than other type of floors. It is quiet as well, and provides a certain amount of sound-proofing, which is an important consideration in housing projects.

lex Asphalt Tile floors have been in use for more wenty years. This* quality *asphalt tile has convinc- demonstrated its ability to perform satisfactorily ny different types of applications where wear is and budgets are limited. For more information, ints of this article, write The Tile-Tex Company, subsidiary of The Flintkote Company), Chicago s, Illinois. Sales offices in Chicago, New York, ngeles, New Orleans, Toronto and Montreal.*

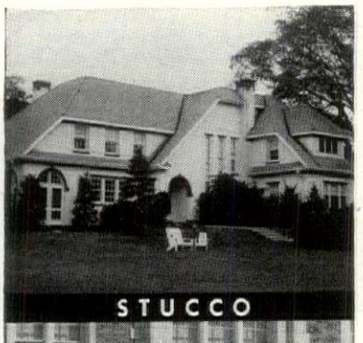
TILE-TEX Company, Inc.
AGO HEIGHTS, ILLINOIS
ERED TRADEMARK OF THE TILE-TEX COMPANY, INC.

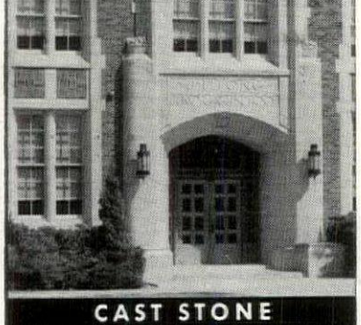
phalt TEX CO. Tile

This "aerial rendering" shows the entire "Homestead" project. There are 17 acres, 19 buildings, 366 four and five room apartments and 100 garages. Notice the careful planning of streets to minimize traffic hazards and provide "off-the-street" parking.



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No Finer White than
MEDUSA WHITE



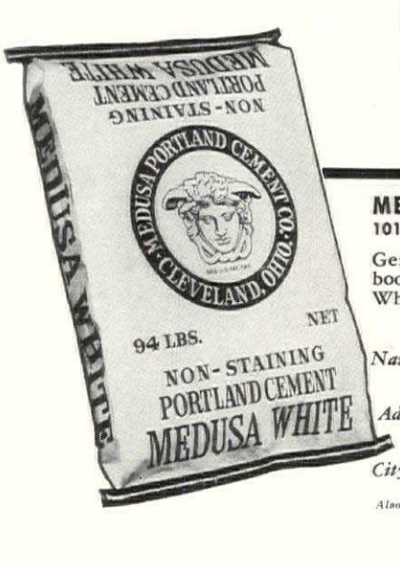




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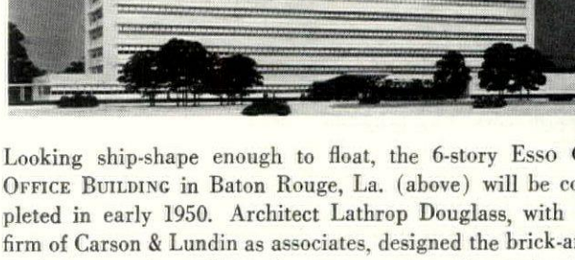
THE AMERICAN INSTITUTE OF ARCHITECTS, 81st Annual C vention, Houston, Texas in March. General theme will "American Architecture in the Atomic Age." Also featu will be a selection of designs from the National College Architecture in Mexico. Also planned is a post-convent tour of Mexico including visits to Mexico City, Acapul Cuernavaca and Taxco and informal meetings with Mexi architects.

AMERICAN INSTITUTE OF DECORATORS' CONFERENCE, N York City, March 21, 22 and 23, Hotel Pierre, Fifth Avenue 61st Street. Included this year for the first time will be a tra exhibit.

THE UNIVERSITY OF OKLAHOMA, Norman, Okla., now off a Masters Degree in City and Regional Planning with unified and correlated program of courses of special inter to the planner in engineering, architecture, social sciences a applied arts.

THE SAINT PAUL GALLERY AND SCHOOL OF ART in Saint Pa Minn. has established a Craftsman's Market for the s and display of craftwork within its gallery. Currently exhibit is the work of over 20 craftsmen connected with group. Included is pottery by Frans and Marguerite Wild hain; jewelry by Philip Morton, Carol Kottke, Sam Kran and Harry Bertoia; enamels by Doris Hall; textiles, Mich Sato; glassware, Bruick; and prints, Whitney Halstead, P Wieghardt and John Talleur.

BUILDING PREVIEWS



Looking ship-shape enough to float, the 6-story Esso OFFICE BUILDING in Baton Rouge, La. (above) will be co pleted in early 1950. Architect Lathrop Douglass, with firm of Carson & Lundin as associates, designed the brick-a steel frame, air-conditioned structure on a thorough-go modular plan to simplify expected future changes in layo No heavy exterior columns are used and offices are formed removable metal partitions. Floors of cellular steel give gr flexibility in the placement of light and telephone outlets. T continuous windows spaced on 4 ft. centers avoid glare a heat by the use of stationery sunshades projecting 3½ ft. a formed of corrugated steel, coated with concrete. Guy Pane Engineers, who planned the mechanical services, have hous them in a central core which rises to the funnel-shaped tow holding elevator and cooling machinery. Later changes in office wings will not interfere with vital servicing. A two-st cafeteria building will adjoin the main offices and will acco modate 450 diners at one sitting; Bodman & Murrell, Ba Rouge architects, drew plans for this dining section. Strol & Salzman acted as structural engineers. John W. Har Associates are builders.

The SHOP AND OFFICE BUILDING for the Broadway Main nance Corp., New York City, will never be seen head-on as the photo of the model on the next page. Its site posed an treme problem in urban design, being completely oversh owed by the Queensboro-Manhattan *(Continued on page 5*

"Coleman Floor Furnaces CUT COSTS, UPHELD VALUE 2 WAYS" ...For Richmond, Va., Builder



Crestview Addition No. 3, developed and built by Duke Construction Co.—heated throughout with Coleman Floor Furnaces to hold down costs, yet give top-quality automatic heating of the kind buyers want.

Buyers feel Coleman equipment proves high quality of Duke Company's houses



Ludwig Bloch, aggressive vice president of Duke Construction Co., Richmond, Va., one of the South's small home building leaders.

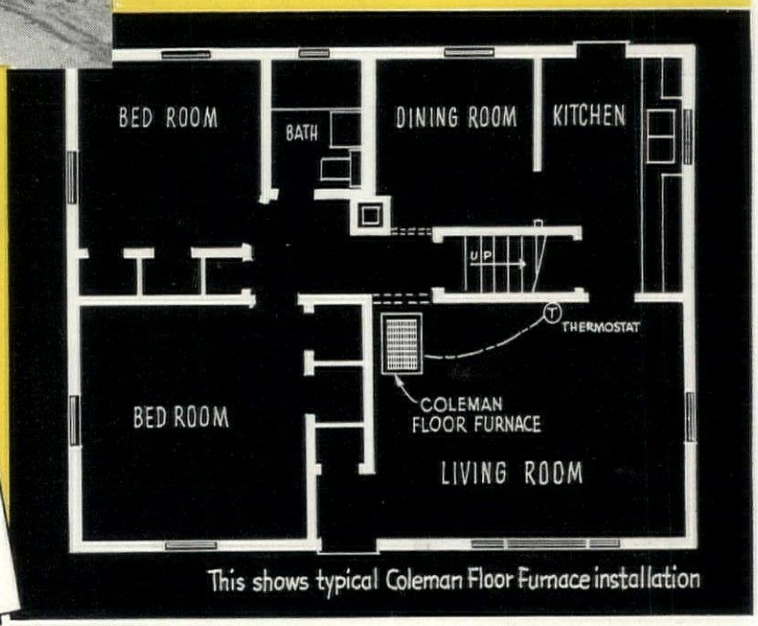
DUKE CONSTRUCTION CORPORATION
7100 HORSEPEN ROAD
RICHMOND, VIRGINIA

The Coleman Company, Inc.
Wichita, Kansas.
Gentlemen:

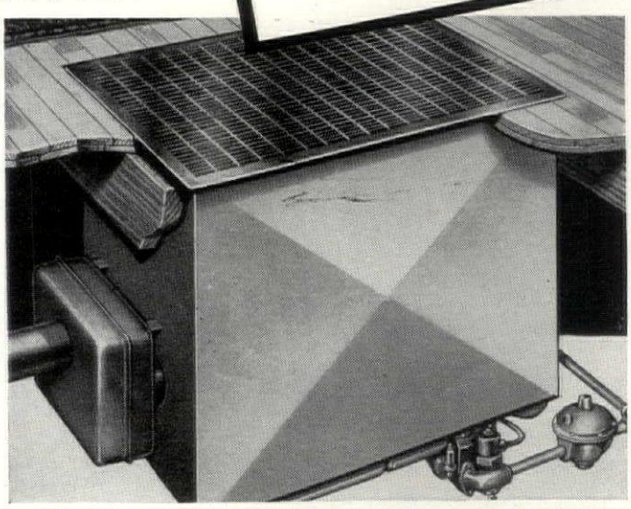
In these days of complaints about high housing costs we have to do everything we can to hold down ceiling prices and still get the quality that customers recognize. That's why we are using Coleman Floor Furnaces. Properly located and properly installed, they reduce building costs, yet give top quality automatic heating. And what's more, Coleman Floor Furnaces are so well known that our buyers consider them real proof that we put best quality materials into our houses.

Ludwig Bloch V.P.

Duke Construction Co., Richmond, Va.



This shows typical Coleman Floor Furnace installation



This is how Coleman Floor Furnace fits into floor. Takes no room space. No basement excavation needed. No costly duct work. No added plumbing expense.

See how Coleman may help you, too, in designing to beat "price resistance"

Duke Construction Company is only one of the many leading building firms now switching to Coleman Floor Furnaces. Scores of these leaders are learning how Coleman helps cut costs: eliminates costly duct work, saves basement excavation costs, cuts skilled-labor expense for installers and plumbers.

And, like the Duke company, they are also learning two other Coleman advantages: First, how Coleman engineering really gives home-owners the "warm-floor" heating and the clean automatic heat they want. Second, how Coleman reputation for quality and service helps sell houses—by proving to prospects that the builder is using the best heating equipment the money will buy.

You, too, want to see proof of these advantages that are switching so many builders to Coleman. Use the coupon below and let us tell you how we can help meet your problem of holding down building cost and selling price. Tell us what kind of fuel you want—gas, oil, or LP-gas—we make models for all three. Do it—today!

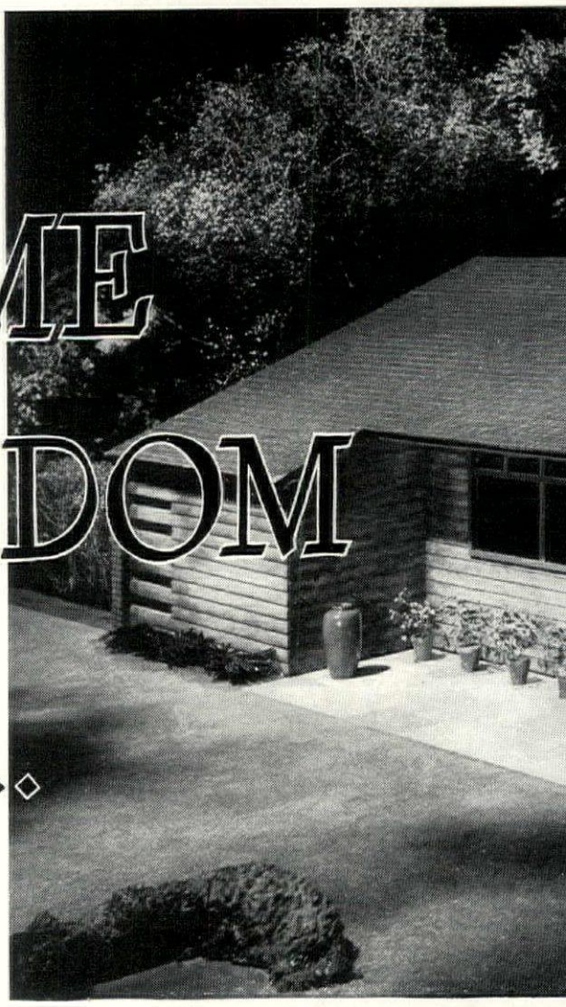
THE COLEMAN COMPANY, INC.,
Wichita 1, Kansas; Philadelphia 8 (Terminal Commerce Bldg.), Pa., Los Angeles 54, Calif.

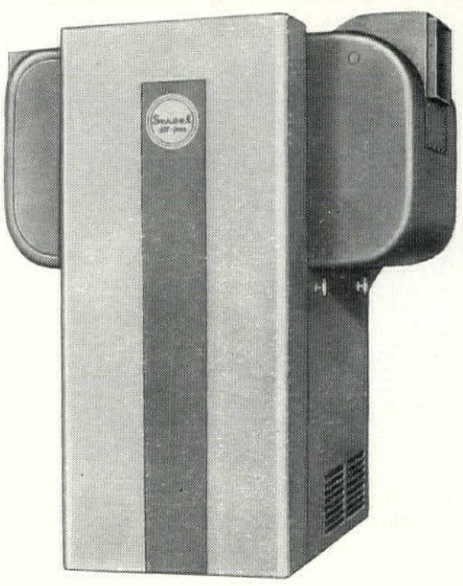
Automatic Gas, Oil, LP-Gas
FLOOR FURNACES
Coleman

The Coleman Company, Inc., Builders Contract Dept. AF-666, Wichita 1, Kans.
Please send me free information about your special cooperation for builders and contractors, and Floor Furnace Builders' Catalog. I am specially interested in:
☐ Gas ☐ Oil ☐ LP-Gas models

Name.....
Address.....
Town..... State.....

The FLAME OF FREEDOM HOUSE...





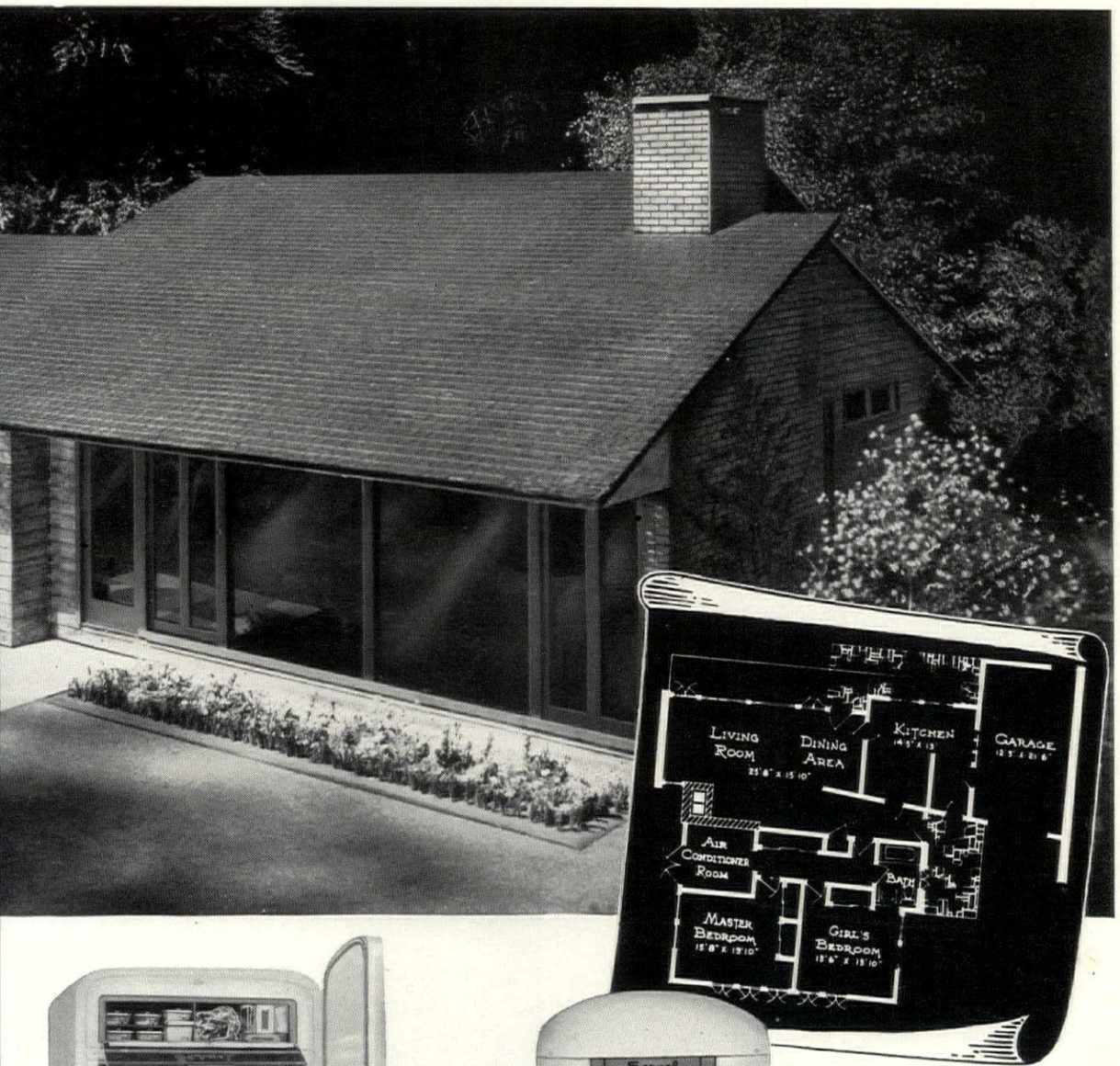
Co-sponsored by Servel, Inc., and Better Homes and Gardens Magazine, The Flame of Freedom House provides the last word in a modern, moderate-priced home. Thanks to scientific planning and all-gas equipment, it brings new freedom to average-income families—freedom that results in greater comfort, convenience, health, and safety. Yes, freedom has been literally built into the plans. For—in addition to large rooms, abundant light, a picture window, and generous closets—this home is air-conditioned year round by Servel . . . food is protected night and day by Servel . . . hot water for every household use is provided around the clock by Servel. You'll find the complete story of the Flame of Freedom House in the February issue of Better Homes and Gardens Magazine.

Servel Inc.

EVANSVILLE 20, INDIANA

The Servel ALL-YEAR Gas Air Conditione

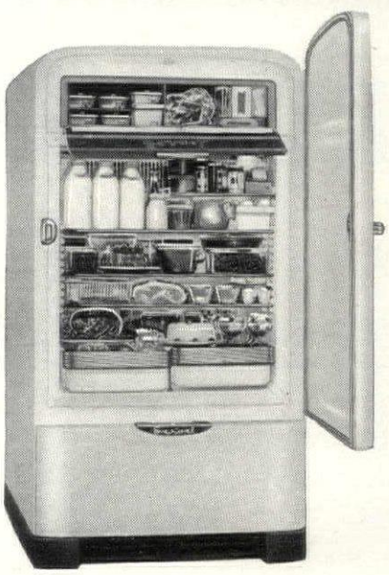
The Flame of Freedom House was especially designed for S *All-Year* Gas Air Conditioning. This means that families l there will be forever free from summer heat, winter cold, draughts, humidity, pollen and prowlers. And yet, this home little more than an ordinary home with a good winter he plant. Planning a house around air conditioning makes r savings possible. No basement excavation is needed. P screens, and storm sashes are eliminated. And the cost of work can be held to the minimum.

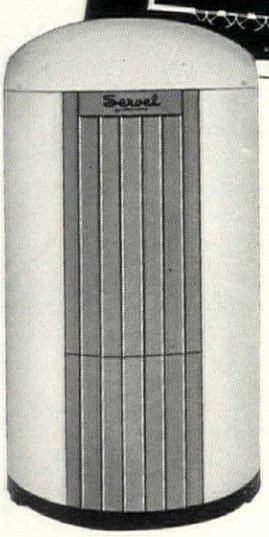


The Flame of Freedom House was designed by the distinguished architect DAVID SEARCY BARROW as one of the 5-Star Homes (*plan No.* 1902) sponsored by Better Homes & Gardens Magazine. This house was reproduced and demonstrated at the Atlantic City Auditorium during the American Gas Association Convention, October 4-8, 1948.

SEE MODEL AT BUILDERS' SHOW

You can see a model of the Flame of Freedom House in the Servel booths 90-93, at the Builders' Show in Chicago . . . February 20-24. And for a free illustrated booklet, write to Servel, Inc., Evansville 20, Indiana.





The Servel **GAS** Refrigerator

different Servel Gas Refrigerator certainly occupies a nant place in the Flame of Freedom House. For this is nly refrigerator that assures owners freedom from the and wear of moving parts. That's because Servel doesn't a single piston or pump, valve or compressor in its freezing system. A tiny, silent gas flame does all the And, of course, the Gas Refrigerator offers every worth- cabinet feature, including a spacious frozen food com- nent, moist cold, dry cold, and a big flexible interior.

The Servel **BALL-TYPE** Gas Water Heater

The presence of the ball-type gas water heater brings freedom from work, worry, delay, drudgery. Based on a new, different operating design, Servel delivers all the hot water needed for modern living's rapidly increasing requirements, including the huge demands of automatic washing appliances. And yet, Servel has a lower operating cost, greater safety and durability than any other heater made. Thus unmatched efficiency and service is the result of Servel's exclusive copper ball tank, internal heat-exchanger, and double insulation.

Your **DOUBLE DEFENSE** *against electrical delay*



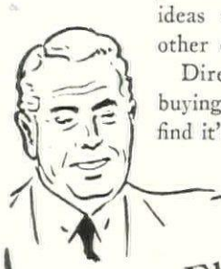
How to keep up to the minute on electrical "widgets"

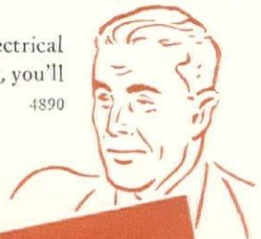
Improvements in electrical wiring materials may be individually *minor* — but they add up to produce *major* economies. It would take days and days for you to keep up to the minute on all the "widgets" coming on the market.

But there's no need to be a detail hound. Through your electrical contractor — or from Graybar direct if desirable — you can get facts on the *genuine* advances, without wasting time on also-rans.

Graybar is an all-inclusive source of electrical product information — for your kind of commercial, industrial, or residential building. Our *specialists* on product application can help you and the electrical contractors you work with, to apply new ideas to any wiring, lighting, ventilating, communicating, or other electrical problem.

Directly or indirectly, you benefit from electrical buying "via Graybar." Both *as* you plan and *after*, you'll find it's good to have Graybar in the picture. 4890



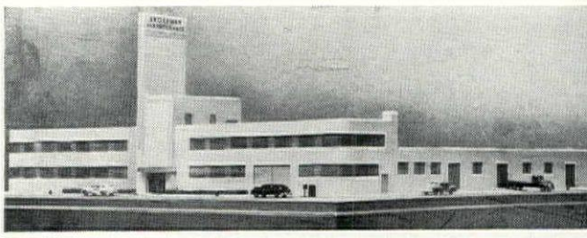


Your Electrical Contractor and . . .

GraybaR

Graybar Electric Company
Executive offices:
Graybar Building, New York 17

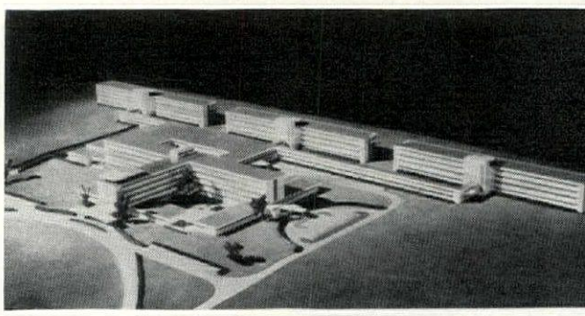
IN OVER 100 PRINCIPAL CITIES



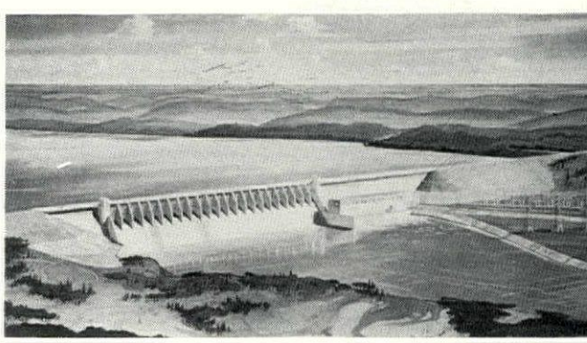
Bridge, with soil that made more than two stories height ina visable for a building of this type. The heavy central pylo 80 ft. high, frankly exists only to assert the identity of t building above bridge level; it will serve another purpo later on, if company's plans develop for radio communicati with its fleet of repair cars.

At this headquarters, a good percentage of New York Ci streetlights, controls and motors will be repaired and kept trim and a number of parts manufactured. Architects Freed Gordon were called on to provide not only for the servicing parts but facilities and equipment for glass-blowing and t manufacture of neon signs; in addition, provision was ma for repair of the repair trucks. Showrooms for neon displa company offices, varied storage space and a small cafeteria a also included in the building's total 60,000 sq. ft. The su rounding noise and vibration made complete enclosure a air-conditioning of the building a must, and indicated the u of directional glass block for all window areas.

FEDERAL ARTISTS' AWARDS



Top design winners: Guam Hospital . . .



. . . and Savannah River Da

The Association of Federal Artists gave awards recently f outstanding work done by architects in its domain—o means of encouraging personal initiative in the necessari bureaucratic government service. The Department of Yar and Docks won first place for its over-all high level of desig O. A. de la Rosa and T. A. Pope's 1,000-bed Medical Cent for Guam was named best in the *(Continued on page 6*

J&L LIGHT WEIGHT JUNIOR BEAMS

replace wooden joists in modern floor construction

J&L STEEL



Fire-safe, vermin-proof, shrink-proof floors for residences and apartments.

Three sound reasons why J&L Light Weight Steel Junior Beams save money in *all* types of light occupancy buildings.

First—They cost less in both time and labor. The extreme simplicity of construction with J&L Junior Beams cuts labor costs and saves time on the job.

Second—They cut maintenance costs. Rigid, vibration-free and shrink-proof, J&L Junior Beam floors eliminate "settling," which causes plaster cracks, sagging doors, and sticking windows.

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The nation-wide trend toward J&L Junior Beam floor construction is a "natural" for residences, apartments and all other light-occupancy buildings.

Remember, J&L is America's only producer of steel Junior Beams . . . Rigid and Vibration-free . . . Shrink-proof . . . Vermin-proof . . . Fire-safe . . . Permanent . . . Easy to install . . . Adaptable to any finished floor . . . Economical!

The Homestead *apartments, LaGrange Park, Ill. The builders,* Wm. Joern & Sons, *specified* J&L *Junior Beam floors (reinforced concrete supported by* J&L *Junior Beams) throughout the 19 buildings—366 apartments of this project. Architects:* Edwin H. Mittelbusher, Howard T. Fisher & Associates, Inc. *General Contractor:* Patrick Warren Construction Co.

Jones & Laughlin Steel Corporation
401 Jones & Laughlin Building
Pittsburgh 19, Pennsylvania

Please send me complete information on J&L Junior Beams and Junior-Beam Floors.

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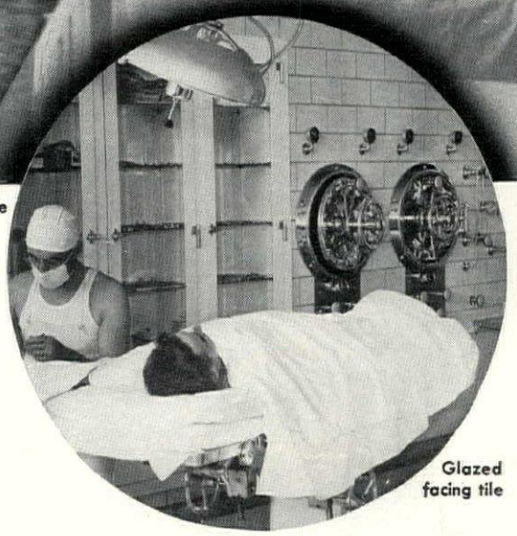
JONES & LAUGHLIN STEEL CORPORATION

From its own raw materials, J&L *manufactures a full line of carbon steel products, as well as certain products in* OTISCOLOY *and* JALLOY (*hi-tensile steels*).

PRINCIPAL PRODUCTS: HOT ROLLED AND COLD FINISHED BARS AND SHAPES • STRUCTURAL SHAPES • HOT AND COLD ROLLED STRIP AND SHEETS • TUBULAR, WIRE AND TIN MILL PRODUCTS • "PRECISIONBILT" WIRE ROPE • COAL CHEMICALS



Glazed facing tile



Glazed facing tile

"Sound prescription"

FOR HOSPITAL PATIENTS AND BUDGETS

INTERIORS OF *Facing tile*

Here's a really sound "prescription" for the hospital you help build—Structural Clay Facing Tile.

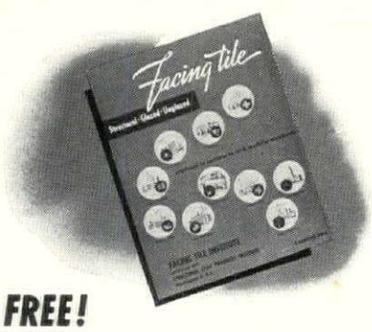
With it you get a compound of these many valuable ingredients:

One part of cheerful interior finish. Facing Tile banishes "sickroom atmosphere". Its bright surfaces can be in pleasant, light-reflecting color patterns, or clean, cool white.

A full measure of maintenance advantages. Facing Tile washes *clean*, quickly and easily, with soap and water. Its impervious surface resists steam and most acids. It *will not harbor bacteria* or any other unsanitary trouble maker.

A double portion of economy. Facing Tile is fast-building, long lasting. It's a structurally strong, firesafe wall *and* finish *in one material, at one cost!* It never needs painting or redecorating, never needs repairs for cracking, marring or decay, even after years of hard wear!

For healthier budgets and happier patients in any hospital, you can "prescribe" Facing Tile with confidence. Complete information is available in Sweet's, from any Institute member, or from us, Desk AF-2.



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This Rockefeller Center skyscraper gets

permanent insulation

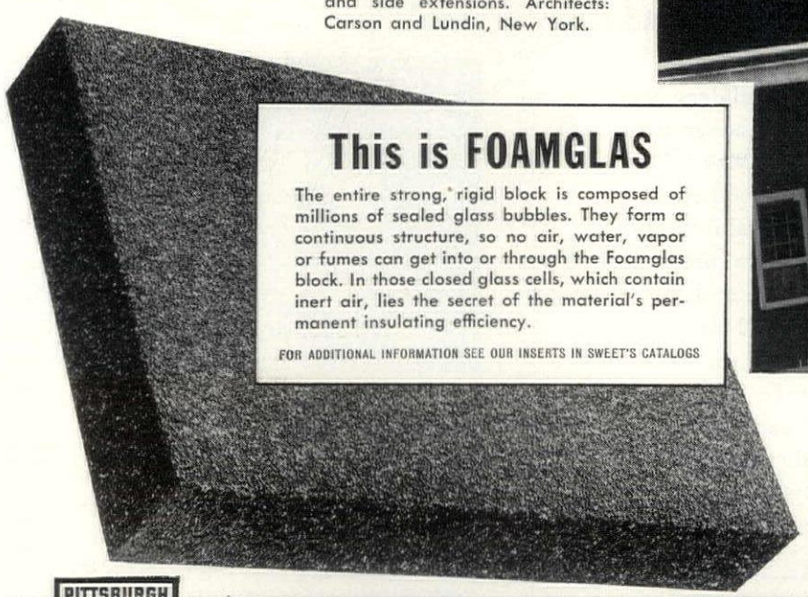
● In many prominent buildings all over the country, PC Foamglas insulation is setting new standards for long, trouble-free service. Because, when installed according to our specifications and recommendations, Foamglas retains its original insulating efficiency *permanently*.

Made of true glass in cellular form, PC Foamglas is waterproof, fireproof, vaporproof, and verminproof. When you specify it for use on roofs and ceilings, in walls and floors, you may rest assured that your clients will find PC Foamglas eminently satisfactory.

Send today for our latest booklets. They are free. Just mail the convenient coupon and your copies will go forward, without obligation.



In the Esso Building in Rockefeller Center, New York, PC Foamglas was used as insulation on the concrete roof decks of the main tower and side extensions. Architects: Carson and Lundin, New York.



This is FOAMGLAS

The entire strong, rigid block is composed of millions of sealed glass bubbles. They form a continuous structure, so no air, water, vapor or fumes can get into or through the Foamglas block. In those closed glass cells, which contain inert air, lies the secret of the material's permanent insulating efficiency.

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Please send me without obligation, your FREE booklets on the use of PC Foamglas Insulation for:

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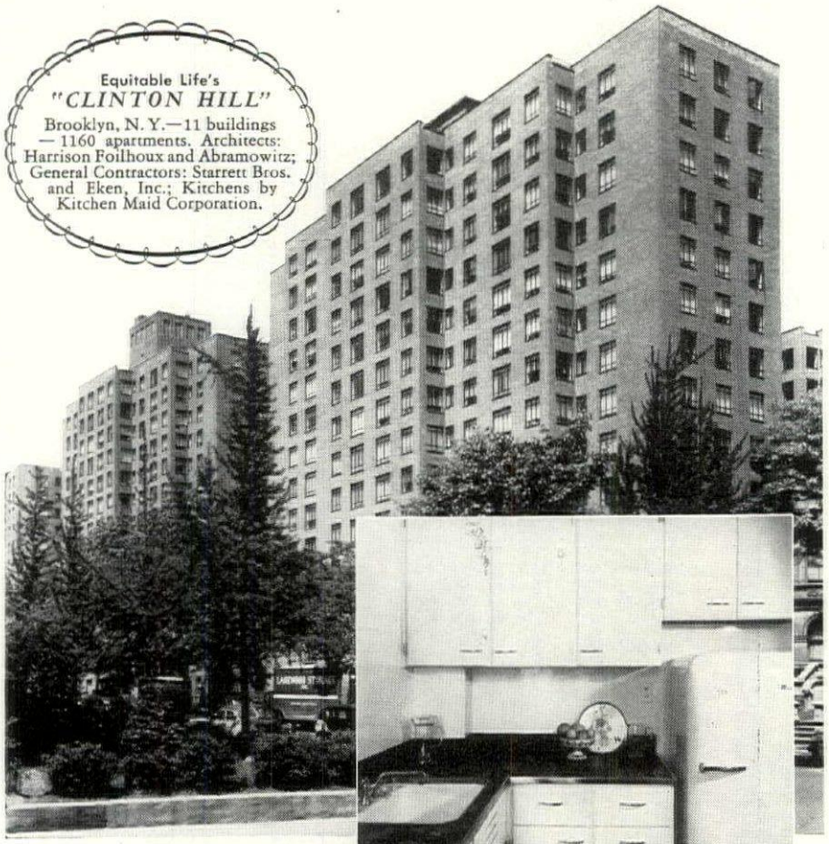
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FOAMGLAS INSULATION

. . . when you insulate with FOAMGLAS . . . you insulate for good!

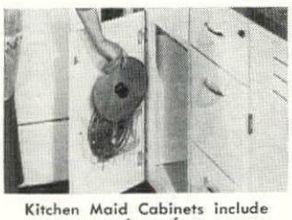
Equitable Life's
"CLINTON HILL"
Brooklyn, N. Y.—11 buildings — 1160 apartments. Architects: Harrison Foilhoux and Abramowitz; General Contractors: Starrett Bros. and Eken, Inc.; Kitchens by Kitchen Maid Corporation.



Kitchen Maid Cabinets in famous Clinton Hill are of modern Flo-Line design—flush panel doors, gently rounded door and drawer edges. Solid hardwood construction, quiet, aluminum drawers and many other features.

Much is Gained

WHEN KITCHEN MAID IS CHOSEN!



Kitchen Maid Cabinets include many convenience features.



Exclusive aluminum drawers—non-chipping, quiet, slide easily.

More and more architects, builders and owners are learning the many advantages of Kitchen Maid Cabinets of Wood. The warmth and friendliness, the modern Flo-Line design, the flexibility, durability, and economy of wood; aluminum drawers, cushioned door action—these and many other features make Kitchen Maid rank high wherever kitchens are discussed. Kitchen Maid representatives are generally the oldest and most experienced in their localities, and are able to render valuable service to architects and builders. Consult them regarding your requirements.

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FIRST AND BEST IN KITCHENS

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Please send new booklet containing 10 practical kitchens with floor plans and details. I am an ☐ Architect ☐ Builder ☐ Dealer.

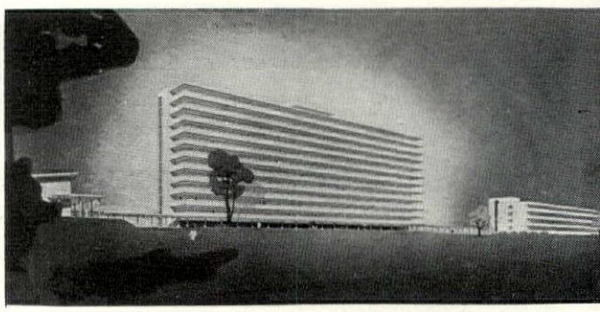
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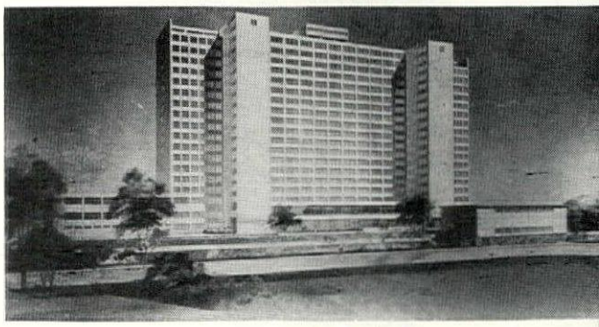
City_____ State_____

exhibit for "its understanding of contemporary design . . . skill and taste in the treatment of a great variety of buildings . . . and a sense of modesty and unaffected honesty of exterior expression." Second design prize went to Clark-Hill Dam on the Savannah River in Georgia, by the District Engineers (Corps of Engineers); third, to an expansible house planned by a group from the Housing & Home Finance Agency. Both awards for site-planning were won by the Department of the Air Force: first, by Charles Goodman's study for an air base; second, a housing area study by S/Sgt. A. C. Lyras.

On the score of draftmanship, the same two buildings won top honors as in the design division—this time in reverse order. The rendering of the Clark-Hill Dam (p. 58) rated first; that of the rear view of Guam hospital (below), by Walter Beal, Jr. placed second.



One section of the exhibit was devoted to work done by private architects under contract to the government. Outstanding here was the dormitory for Shiprock Boarding School on the Navajo Reservation, New Mexico, by architects Perkins & Will. The drawing below of the Veteran's hospital in Pittsburgh (James Mitchell, delineator) placed first among renderings of buildings designed by private firms. While commending work shown in every division, the jury urged in the future "more rigid discipline and directness" as well as the development of taste "which will express its technique in most convincing terms and still be pleasing to the eye."

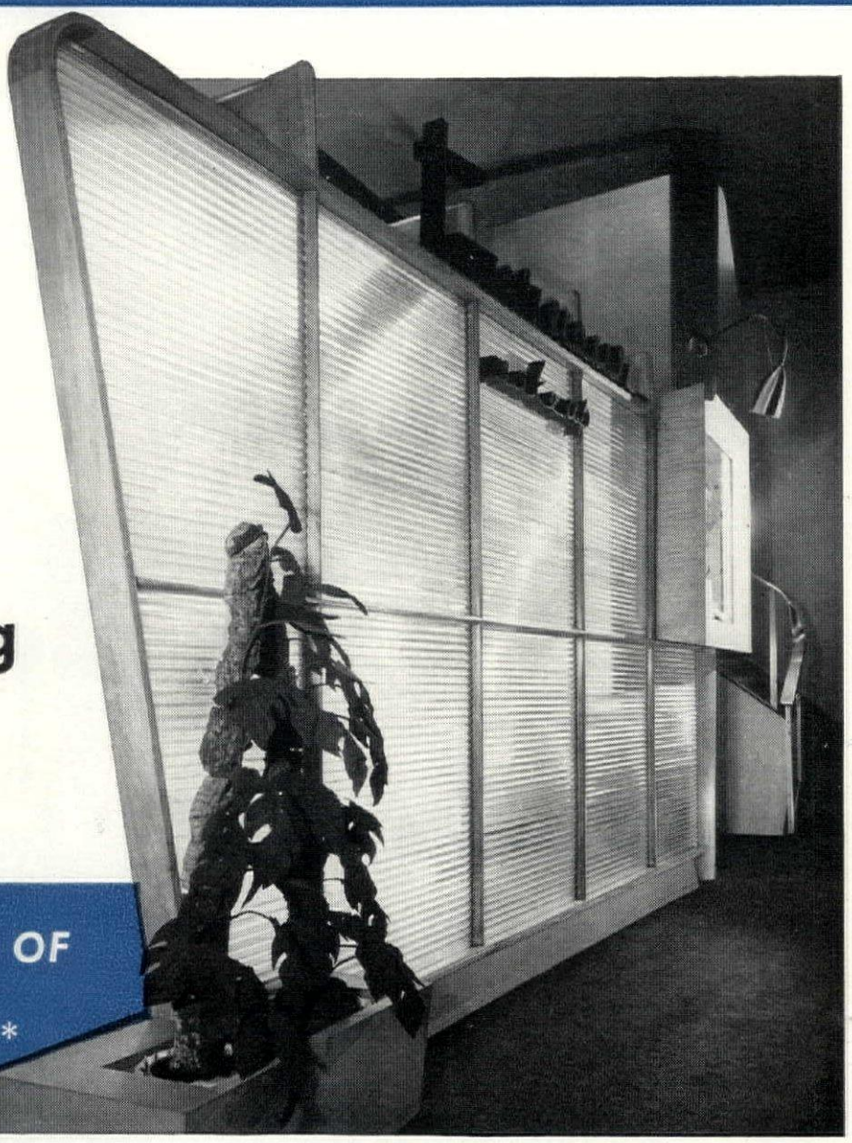


BETTER CHURCH SCULPTURE

In an effort to break the vicious circle which is holding U. S. church design and decoration to successive rounds of bad example and worse imitation, the Liturgical Arts Society (armed with $19,000 from an anonymous donor) recently commissioned ten well-known sculptors to develop their interpretations of traditional religious themes. A jury formed of Phillip Adams (the Cincinnati Museum) Daniel Rich (the Art Institute of Chicago), Rev. John LaFarge, Chaplain of the Society and the late Mrs. Juliana Force (the Whitney Museum), chose the participating artists: Ivan Mestrovic, Jane de Coux, Henry Rox, Henry Kreis, *(Continued on page 66)*

Every Architect Sees Something Different

IN THIS PICTURE OF *Plexiglas**



PLEXIGLAS *enclosure for Beauty Bar at Bonwit-Teller's, Philadelphia*
Designer: Adolph Novak, New York City
Fabricator: American Wood Workers, Philadelphia

One sees gleaming, translucent beauty in functional panels. Another sees easy combination with wood or metal. A third sees excellent optical properties for the transmission and diffusion of light. What *you* see will depend, of course, upon the current design problem on your drafting board.

Is your problem one of space division? PLEXIGLAS is recommended by The Architects Collaborative for partitions, screens, panels. Difficult curvatures? PLEXIGLAS is flexible—easily formed to virtually any shape. Light and air? Insulation? Workability? PLEXIGLAS adapts readily to windows, louvres, transparent doors and skylights. And like soft wood or metal, it is easily cut, sawed, drilled, threaded or notched for *pre-fabrication* or rapid installation.

In Louisville, PLEXIGLAS is used in a greenhouse. In Philadelphia, it's the glazing in a vocational school. In Los Angeles it encloses a swimming pool. And in other American towns and cities, architects are using this astonishing acrylic plastic for such unusual applications as astradome-shaped skylights, picture windows, shatter-proof glazing in psychiatric hospitals, portable skating rinks, toilet partitions, edge-lighted radiant walls and *entire rooms* in clubs.

Do your designs call for exceptional strength-lightness, shatter-resistance, practical decoration? Then learn the full story of PLEXIGLAS and its use in architecture. For your personal file, we've reserved a copy of the installation details of the Bonwit-Teller partition illustrated. Please let us know where to send it.

PLEXIGLAS—

ONE OF THE GREAT NEW MATERIALS OF OUR TIME

PLEXIGLAS *is a trade-mark, Reg. U. S. Pat. Off.*

CHEMICALS FOR INDUSTRY

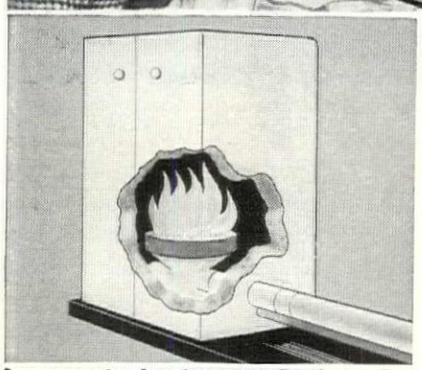
ROHM & HAAS COMPANY

WASHINGTON SQUARE, PHILADELPHIA 5, PA.

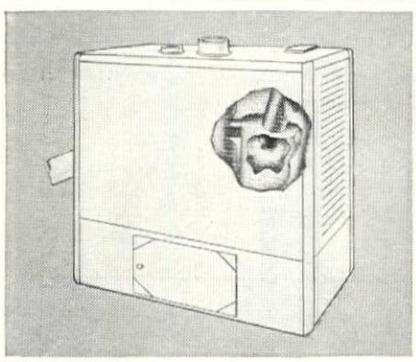
Representatives in principal foreign countries

Will cold weather mean cold words in houses you build?





Automatic Anthracite Stokers—Installed in an existing boiler or furnace and in new houses, automatic hard coal stokers deliver *plenty* of heat quickly . . . save up to 50% on fuel bills . . . eliminate fuel worries.



The Revolutionary Anthratube—The Anthratube saves on fuel bills . . . its proved efficiency is over 80%. This scientifically engineered boiler-burner unit, with "Whirling Heat" and other revolutionary features, produces quicker response and superior performance than units using other types of fuel.

There are no Ifs, Ands or Buts when you specify Automatic Anthracite Heating

OWNERS of your new houses *can* have *plenty* of worry-free heat because there's plenty of hard coal and there is anthracite equipment to fit any heating requirement.

A whole winter's supply of anthracite can be stored easily in advance. Everyone wants this kind of security and convenience. They have *just that* when you specify automatic anthracite equipment.

Look over the two types of domestic anthracite equipment shown here. They burn the cheaper sizes of economical hard coal . . . completely automatic from bin feed to ash removal.

Write to us for more detailed information on all types of anthracite heating equipment—domestic and commercial.

ANTHRACITE INSTITUTE

101 Park Avenue New York 17, New York

These Experiences are Proof



"Increased dollar volume and better employee efficiency have resulted from my decision to install Frigidaire Air Conditioning in my jewelry store," says Robert S. Cohen, Winchester, Ky. C. Ratcliff Henry, Winchester, handled the installation of these Frigidaire Store Conditioners.



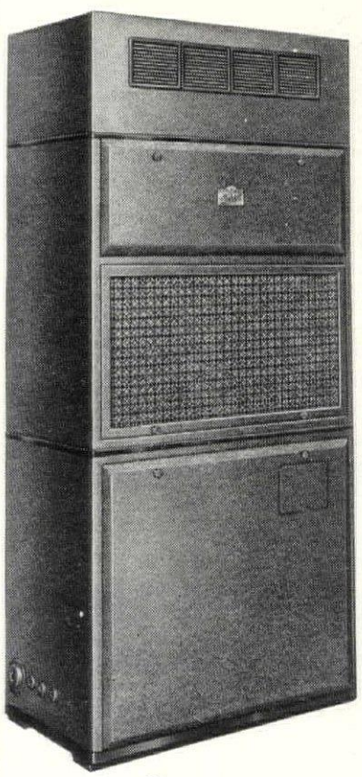
"Frigidaire's high quality was well-known to us," says B. F. Spitzig, vice-president of Sleepeck-Helman Printing Co., Chicago. "That's why we picked two Frigidaire Room Conditioners for relief from heat and grime." North Town Refrigeration Co., Chicago, sold the equipment.



"One of our best investments—both from the standpoint of employee efficiency and operating costs—is our Frigidaire Air Conditioning System," says Harold Star, executive vice-president of Dallas Title & Guarantee Co., Dallas, Texas. Joe Hoppe & Co., Dallas, was the dealer.

Frigidaire Air Conditioning

makes a good business better!



Frigidaire SC-501 Store Type Conditioner. Two-tone brown finish; welded steel construction; delivers up to 2,000 cu. ft. of conditioned air per minute; 12" centrifugal fan powered by ¾ H.P. motor, 230 V., 60-50 cycle, single phase AC; water-cooled compressor powered by 5 H.P. motor, 220 V., 60-50 cycle, 3-phase standard AC.

Frigidaire Packaged Air Conditioners For Stores, Offices and Homes

Yes, Frigidaire Packaged Air Conditioners can do big things for dollar volume—at mighty little cost. They are responsible for increases of up to 35% in many businesses. Yet they cost so little to install, operate and maintain that they often pay for themselves in a single summer!

The handsome, compact "package" shown at left contains everything necessary to cool, filter, dehumidify and circulate air. It can be installed right in the space to be air conditioned, with no interruption of building routine and no expensive building alterations. It can be used singly or in multiples, with or without a simple duct system. And a heating coil can be added for all-year operation!

Compressor, cooling unit and controls are precision-matched to work together like a championship team. That's why Frigidaire Air Conditioners operate at lowest cost, provide year after year of trouble-free service.

For a full line of products you can depend on, and a name you can depend on, call your dependable Frigidaire dealer. Or write Frigidaire Division of General Motors, Dayton 1, O. (In Canada, Leaside 12, Ont.)

Frigidaire Central Systems

For theaters, larger stores, general offices and industrial uses.

Frigidaire Room Air Conditioners

Window and floor types. Easily installed. For rooms up to 750 sq. ft.

Frigidaire Air Conditioning

Visit the Frigidaire Exhibit, Booths 33-36 inc., at the National Home Builders Show, Stevens Hotel, Chicago, Feb. 20-24.

For fast facts about Frigidaire Products—fill in and mail coupon today

Frigidaire Air Conditioning

☐ Room size air conditioners. Store size air conditioners. Central systems.



Frigidaire Water Coolers

☐ Pressure, bottle and industrial types; central systems. Variety of sizes and capacities.



Frigidaire Reach-In Refrigerators

☐ Self-contained or remote types up to 60 cu. ft. Forced air or ice-making cooling units.



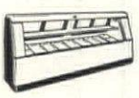
Frigidaire Ice Cream Cabinets

☐ Remote and self-contained models. 4-hole to 10-hole sizes.



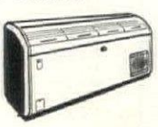
Frigidaire Display Cases

☐ Self-service and standard types. Normal and low temperature models.



Frigidaire Beverage Coolers

☐ Both wet and dry models available in several sizes.



Frigidaire Compressors

☐ Sealed rotary and reciprocating types. Sizes up to 25 H.P.



Frigidaire Cooling Units

☐ Forced air, wet and dry expansion, evaporative and ice-making types.



Frigidaire Home Appliances

- ☐ Household Refrigerators
- ☐ Home Freezers
- ☐ Electric Ranges
- ☐ Kitchen Cabinets and Sinks
- ☐ Automatic Washer, Ironer, Dryer
- ☐ Electric Water Heaters
- ☐ Electric Dehumidifier

Name .....

Firm Name .....

Address .....

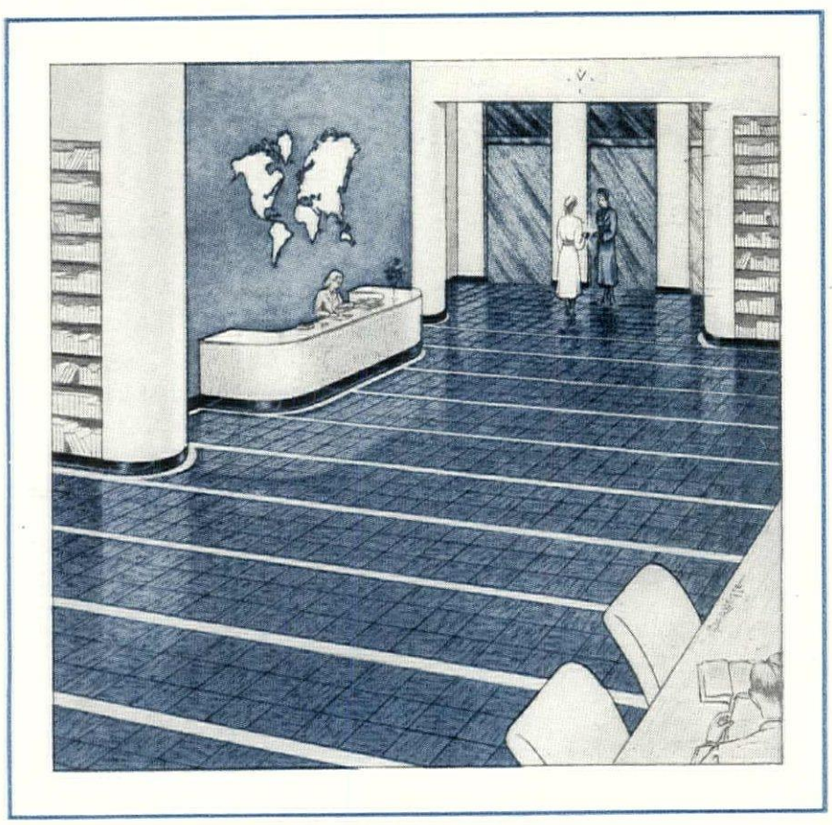
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Zone or County ..... *State* .....



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"and I *need* quiet . . . both here and in the library. That's why I'm specifying Hood Rubber Tile Flooring. Its resiliency assures quiet and comfort. The harmonizing colors enhance my decorating scheme, and they'll stay *fresh* and *bright* for a lifetime!"



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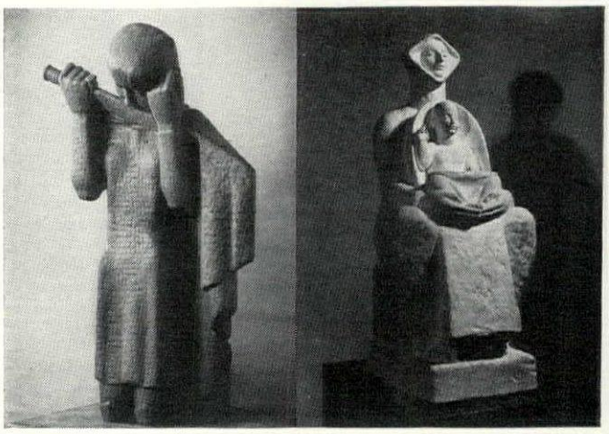
RUBBER TILE

Hood Rubber Co.
A DIVISION OF
B.F. Goodrich
WATERTOWN, MASS.

ASPHALT TILE

ANNOUNCEMENTS

Helene Sardeau, Oronzio Maldarelli, Charles Umlauf, Erwin Frey, Suzanne Nicolas and K. George Kratina.

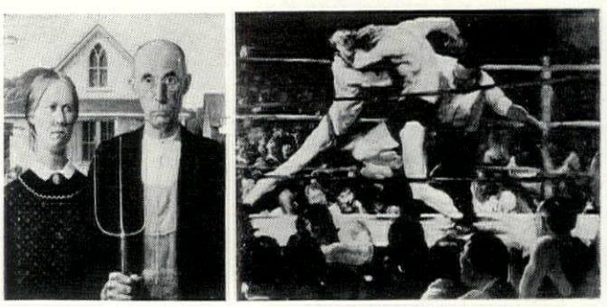


The project represents a conscious step toward reestablishing the tradition of church-building (never entirely lost in Europe) which assigned to sculpture and painting integral parts in the structural design. A striking example completed since the war is the church at Assy, France (See, FORUM, Jan. '48, p. 160) incorporating as it does, Leger's vast portico mosaic, Roualt's stained glass and Braque's altar design. Niemeyer's originality in using exterior tile murals for the church at Pampuhla, Brazil shows the New World potentialities of such collaboration.

The present effort of the Liturgical Arts Society is admittedly only a first step towards this goal—the artists, per force, having designed without reference to final placement. It does, however, fill a needed gap by bringing to public attention the part that modern sculpture is equipped to play in church design. The statues, themselves, vary widely in feeling and treatment. The simplicity of gesture in Henry Rox's "Joan of Arc" (above left) gives it a distinction not attained by some of the more elaborate figures. Simplicity and power are also shown in the crucifix designed by Mestrovic as one of his submissions; the former quality, however, is somewhat lost in his other piece—an eye-catching but overly aloof Madonna (right).

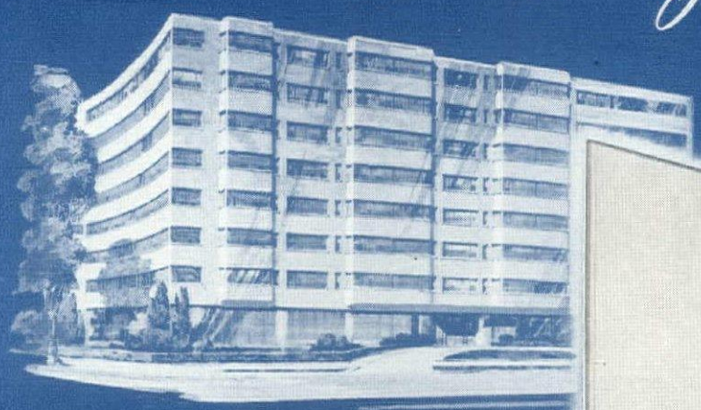
Barry Byrne, Chicago architect specializing in church design, arranged the exhibit of these statues which were on view in the Demotte Galleries, New York, during January and the first week of February.

EXHIBITS



AMERICAN PAINTING IN OUR CENTURY. The Institute of Contemporary Art, Boston, Mass., through March 20th. Fifty paintings of the last 50 years have been chosen to illustrate major trends in U. S. art today. Besides Grant Wood's *American Gothic* and George Bellows' *Stag at Sharkey's* (above) works by John Sloan, Charles Burchfield, Reginald Marsh, Peter Blume, Jack Levine, Ben Shahn, John Marin and Lyonel Feininger are included. The paintings have been brought together through *(Continued on page 70)*

Do it the DuPont Plaza way.



Aubinoe-Edwards-Beery, Washington, D. C.—Architects



CUT PER-UNIT COST
GET MAXIMUM INCOME
WITH THIS
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PARSONS Pureaire KITCHEN



The All-New 1949 Pureaire

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• In Washington's beautiful *new* DuPont Plaza Apartment Hotel . . . 328 of these gleaming Pureaire Kitchens have been installed by Alvin L. Aubinoe, prominent Eastern builder.

Why? Because Pureaire is only 48 inches wide—a complete kitchen that takes only 8 square feet of expensive floor space . . . a great saving in Per-Unit Cost!

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Then add this exclusive feature—Pureaire's patented ventilation whisks out cooking odors and heat . . . makes apartments cooler . . . more pleasant!

Let us show you how others have used Pureaire Kitchens so successfully during the past 20 years . . . pictures of typical installations in apartments, multiple housing units, motels, homes and institutions . . . typical floor plans . . . specifications.

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Drop in on us and see the All-New Pureaire, Exhibit 18, National Home Builders Show, Feb. 20-24 at The Stevens.

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• Thermostatically controlled porcelain-enameled interior—heavily insulated—shelves adjusted to any level—fluted door. Gas Oven has similar features.

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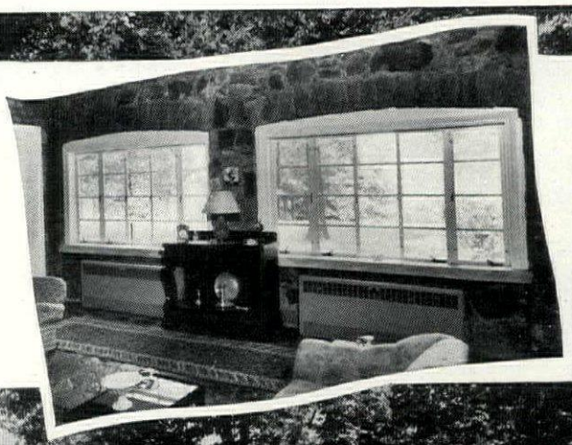
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design flexibility



Notice the unusual treatment of graceful Fenestra Residence Steel Casements in this beautiful residence at Shades Mountain, Birmingham, Alabama. The inset shows the bright living room of the home. Architect: D. O. Whilldin, Birmingham.

. . . and keep costs down

Standardization . . . flexibility. A contradiction in terms? No. Because Fenestra's* volume of production permits standardization of a *large variety* of windows. Quality stays up . . . costs come down.

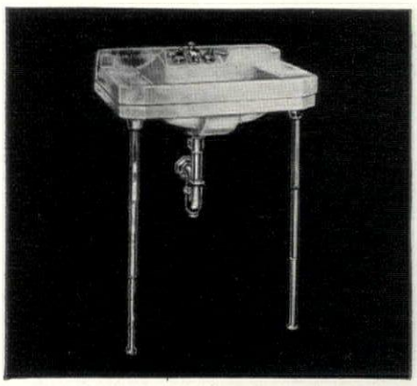
There's a right Steel Casement in Fenestra's Family for every spot in the house. And a wide range of widths and heights with vents that swing right or left. Muntin bars can be removed for larger, undivided glass areas.

Use Fenestra Casements singly . . . or combine them into window walls . . . have picture windows flanked by casements . . . have charming bays and corner windows.

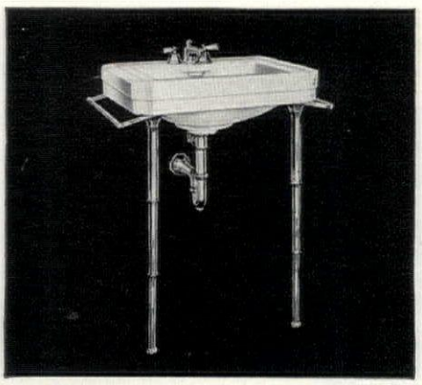
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You'll find full information in Sweet's File—Section 16a-13. Better yet, call or write us. Detroit Steel Products Co., Dept. AF-2, 2251 East Grand Blvd., Detroit 11, Michigan. *®

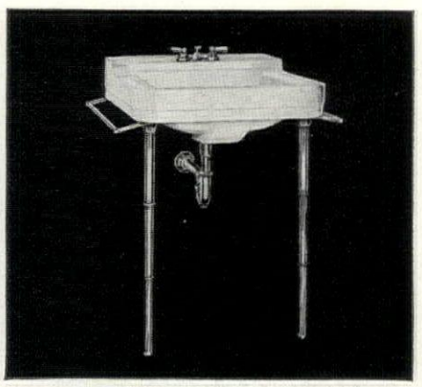
Fenestra **STANDARDIZED BUILDING PRODUCTS**
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Way 1—The Cosmette (940). Integral shelf, square basin, front overflow, anti-splash rim and slanted control panel. Also wall hung.



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Way 3—The Winston (805). In sizes adaptable for a wide variety of floor plans. One of the most popular Case fixtures.

FOR ANY INSTALLATION...

6 Ways to please your clients



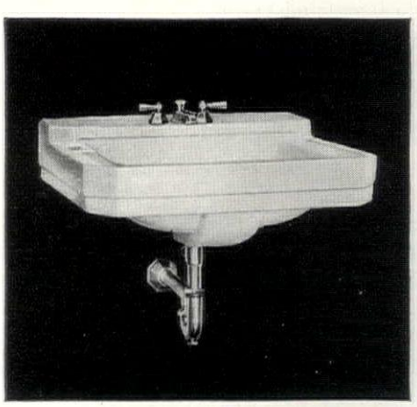
Your clients may not have a laurel wreath handy, but when you specify one or more of these Case quality lavatories they tell their friends and proudly display the result. This "free advertising" is an extra, over and above the satisfaction of providing the best in plumbing fixtures.

Case vitreous china lavatories are easy to install, which means a saving everybody likes these days. Their pleasing design, mechanical excellence and durable beauty are available in models for every need. Use the facilities of your Case distributor, listed in Classified Telephone Directories.

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96 YEARS OF SERVICE

Vitreous China Plumbing Fixtures



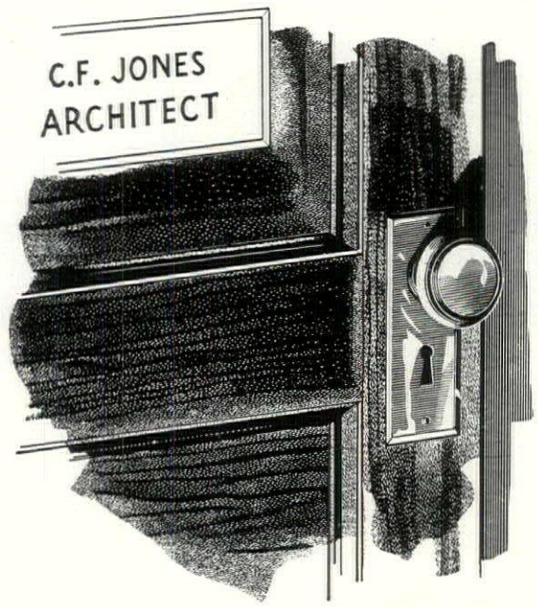
Way 4—The Winstead (840). Measures 22″ x 18″ overall, yet has spacious square basin and useful shelf for toilet accessories.



Way 5—The Westbrook (520-C). Widely favored where a pedestal style is desired. Exposed fittings chrome plated, as on all Case lavatories.



Way 6—The Avon (912). A Case quality lavatory at low cost. Front overflow, anti-splash rim, chrome plated supply and pop-up waste fitting.



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specify penta-treated wood
chlorophenol

TODAY you can give your clients the satisfying assurance of longer life and lower maintenance costs for wood construction. NOW you can recommend wood with its economy, versatility, and natural insulating properties for building in many localities where decay and termites are prevalent.

PENTAchlorophenol, the *modern* wood preservative, provides effective protection against decay and termites at small extra cost. "PENTA" makes possible new uses for wood and also new economies for your clients.

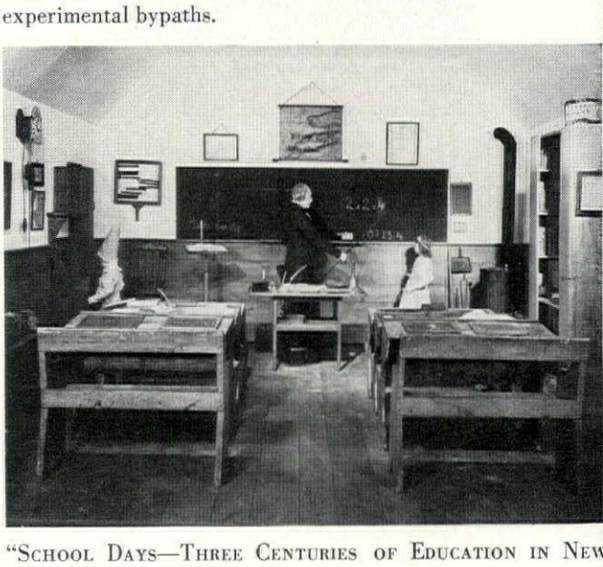
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Dow
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cooperation of the Metropolitan and Whitney Museums, New York City, the Chicago Art Institute, the Detroit Institute of Art, the Philips Gallery, Washington, and the Addison Gallery, Andover.

This is not merely a retrospective exhibit, but a step on the part of the museum to clear up the confusion created last year by its rather ambiguous change of title (from "modern" to "contemporary" art). Whether the showing of this outstanding collection will achieve its avowed purpose of "a clarification of the contemporary scene"—is uncertain; however, it does make clear the Museum's new course—on the tried-and-true highways of modern art with not a sally down its more experimental bypaths.



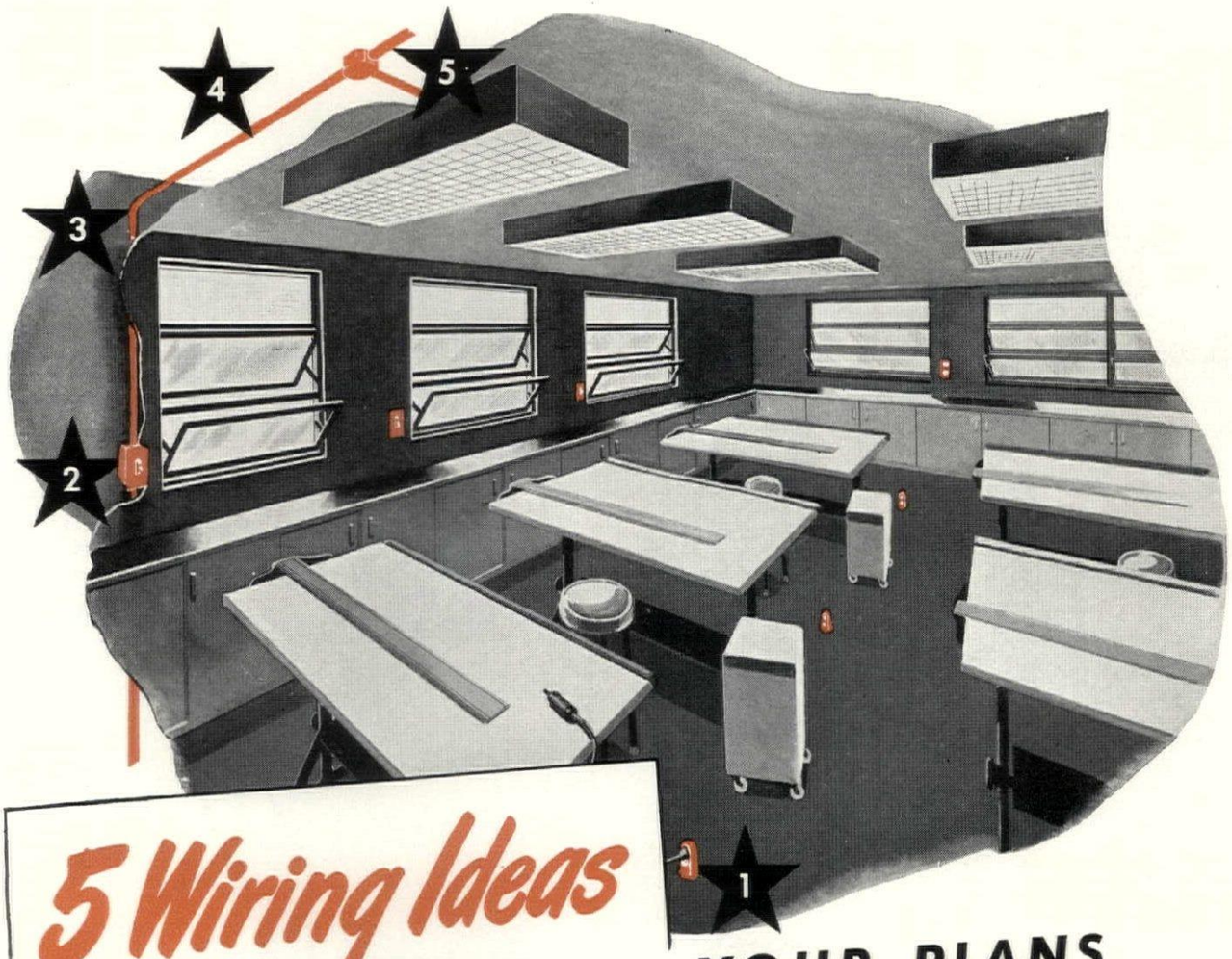
"SCHOOL DAYS—THREE CENTURIES OF EDUCATION IN NEW YORK." On view at the Museum of the City of New York through March 5. Recalling days when cross-ventilation brightness levels and studied acoustics had not yet been introduced to the three R's, this show holds, in addition to its historical interest, a special charm for today's planners, breathing hard to keep up with new developments. They can find here a few pleasant minutes of congratulation for the great distance covered in school design during the past few centuries. The main feature of the exhibit (which also includes paintings photographs, manuscripts, and original textbooks and children's work) is the original schoolroom of 1800 shown above complete from painted blackboard to corner dunce cap.

COMPETITIONS

THE AMERICAN INSTITUTE OF ARCHITECTS has instituted an annual nation-wide program of Honor Awards for Current Work. The first program, in 1949, will make awards for distinguished accomplishment in design of residential and school buildings completed since January 1, 1945. Entries, by corporate members of the A.I.A. only, must be submitted to local chapters by March 1, 1949.

THE MANAGING COMMITTEE OF THE JOHN STEWARDSON MEMORIAL SCHOLARSHIP in Architecture announces a competition for a scholarship of $1,300 to be used for study of architecture in this or foreign countries. Eligible are U. S. citizens who have studied or practiced architecture in Pennsylvania for at least one year immediately preceding the award. Registration blanks, which must be filed before March 15, 1949, are available on request to the Secretary, Henry D. Mirick, Room 809, 12 South 12th St., Philadelphia 7, Pa.

THE BROOKLYN CHAPTER, AMERICAN INSTITUTE OF ARCHITECTS, announces its 19th annual architectural competition open to architectural students *(Continued on page 74)*



5 Wiring Ideas ...TO BRIGHTEN YOUR PLANS

A specific wiring material for a specific job—that's the new idea in planning for a productive, profitable drafting room.

To help you make the right choices every step of the way—we've picked five tailor-made ideas right off your General Electric distributor's shelves. Look them over for real help in your planning job.

1. UNDERFLOOR WIRING is the ideal system for this kind of equipment. G-E Fiberduct raceways or Q-Floor Wiring provide for outlets in the floor practically anywhere, any time they're needed. As room arrangement is changed—as desks are moved—as electrical appliances are added—outlets can be moved or added, too, in a matter of minutes. For a drafting room that keeps pace with the times, give it flexibility with G-E Fiberduct or Q-Floor Wiring.

2. MERCURY SWITCHES are General Electric's silent switches you've heard so much about. They're made for spots where people constantly flip lights ON and OFF. After years of operation, they keep on doing their job well. A pool of mercury flows from the open to closed position silently—with no apparent friction or wear. G-E mercury switches fit wherever standard switches fit—carry a full 10-ampere rating.

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3. TYPE TW WIRE. Here's another good bet for the installation that's going to stay modern in the years ahead. Small-diameter, long-life General Electric Type TW wire conserves space in conduit—leaves room for additional wiring later on, without additional raceways. This smooth, thermoplastic wire is an installation-timesaver, too, because it pulls through conduit easily—makes cutting and stripping a fast operation.

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5. HEAT-RESISTANT Deltabeston* fixture wires are a "must" in a location like this. Where lamps burn continuously, heat-beating Deltabeston wires are a wise precaution. Make sure they're part of every fixture you buy. And, to make your fluorescent installation complete, specify G-E Watch Dog* starters. They automatically cut out blinking lamps—keep lighting continuous and even.

Why not get the habit of looking to your General Electric distributor for ideas and advice—as well as for wiring materials? He has a full line of materials to choose from—and a wide range of experience he'll gladly share with you. Contact him for information—or write to Section K14-24, Construction Materials Department, General Electric Company, Bridgeport 2, Connecticut.

GENERAL ELECTRIC



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2. ***Presdwood permits speedy installation without fuss or muss***
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There are many reasons for using time-proved Masonite Presdwood to build or remodel. In stores, shops, offices, in homes, clubs, hotels—just about everywhere—it offers broadened design possibilities.

Available in large, rigid panels of great strength and structural stability, Presdwood is grainless, hard and dense—won't split, crack, chip or dent. It can be bent in graceful curves. Its smooth surface takes finishes beautifully—and holds them.

Easily worked with carpenters' tools, Presdwood goes up quickly over existing walls or in new construction. On remodeling jobs, that means rapid completions without interrupting normal business operations. For all exterior applications and interiors subject to unusual wear or moisture conditions, Tempered Presdwood should be used. See our insert in Sweet's Architectural File.

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"Masonite" and "Presdwood" are registered trade-marks. "Masonite" signifies that Masonite Corporation is the source of the product.

Where 67,000,000 *Unique* SASH BALANCES *have gone*



WORLD'S FIRST TUBULAR SASH BALANCE

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Windows in Canada, Australia, England and in these United States . . . numbering more than 18,000,000 . . . here more than 67,000,000 Unique Balances can be found.

The secret of success can be attributed to Unique's desirability, practicability and durability.

Thousands of Architects and Builders know that Unique Sash Balances are the secret of window success in their buildings.

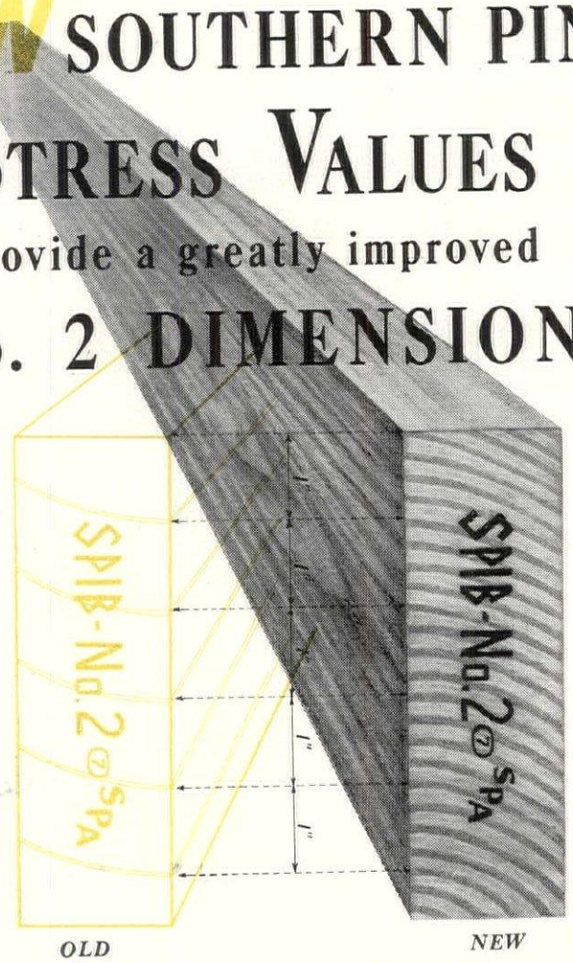
UNIQUE BALANCE COMPANY, INC.

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NEW SOUTHERN PINE STRESS VALUES

provide a greatly improved

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EXAMPLE:

- ★ BENDING STRESS 1,100 POUNDS PER SQ. IN.
- ★ BETTER TEXTURE (MINIMUM 4 RINGS PER IN.)
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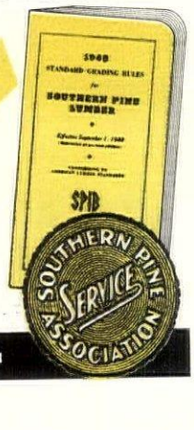
Possessing greater load-bearing strength than previous No. 2, this new grade of Southern Pine framing is better qualified for residential and light commercial construction. Proper seasoning is a definite provision, by which this material is *pre-shrunk* and may be used with safety for longer spans than heretofore.

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For authentic data to guide you in specifying or purchasing every Southern Pine classification, send for these new 1948 Grading Rules. Your copy, plus the Grade Use Guide, will be mailed on request.



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Canal Building . . . New Orleans 4, Louisiana

residing in its territorial area as well as architectural draftsmen employed or residing there. The subject will be a Youth Center Building to serve as a model for communities in which there exists a pressing need to meet the problems of juvenile delinquency. The program will be issued sometime early in January, 1949.

APPOINTMENTS

EMLEN ETTING, artist and illustrator, to the teaching staff of Florida Southern College.

NEMBHARD N. CULLEN AND DONALD DODGE, as partners in the firm of Frederick G. Frost.

GEORGE BAIN CUMMINGS of Binghamton, N. Y. to the Board of Directors of the American Institute of Architects filling the vacancy caused by the death of William G. Kaelber of Rochester, N. Y. Cummings will serve as Regional Director of the New York District until the A.I.A. convention in March, 1949.

O. J. BAKER, A.I.A., to head the newly-created Department of Architectural Engineering of Louisiana State University, College of Engineering, Baton Rouge, La.

NEW OFFICES

JOHN S. MCDONALD, engineer, 2438 Glenmore Avenue, Dayton 9, Ohio.

HAROLD A. OBST, architect, 302 South County Road, Palm Beach, Fla.

N. J. PASCULLIS, general practice of architecture, 609 Bankers Insurance Building, Macon, Ga.

BERNARD KESSLER, architect, Bennington College, Bennington, Vt.

BENJAMIN H. AND BERTRAM LEE WHINSTON, general practice of architecture, 465 Lexington Avenue, New York 17, N. Y.

BERNARD J. FRIEDMAN, architect, 210 North Church Street, Tucson, Ariz.

AMMANN & WHITNEY, consulting engineers, expansion to include the following staff members as associate partners: Milton Brumer, Werner Ammann, Boyd G. Anderson and James S. Whitney.

E. B. VAN KEUREN, CHARLES F. DAVIS, JR., PAUL M. SPEAKE AND J. MARION THRASHER, partnership for the general practice of architecture and related engineering, American Life Building, Birmingham, Ala.

ALLAN BERKOWITZ, A.I.A., 2010 Chancellor St., Philadelphia 3, Pa.

CLAY, POTTER & COULTER, architectural partnership, 308 East 50th Street, New York 22, N. Y.

MAX J. WOLFSON, architect, 3845 Alta Vista Terrace, Chicago 13, Ill.

ABRAHAM LEVY AND EDWIN SILVERMAN, offices for the practice of architecture, 1411 Walnut St., Philadelphia 2, Pa.

HANKINS & TRAPNELL, consulting engineers, 300 Main Street, Richmond 19, Va.

THE H. K. FERGUSON CO., western district office, 712 Cursor St., Los Angeles, Calif. Henry Maag, manager.

MYRON F. NELLE, structural engineer, 717 Cottage Grove Ave. South Bend, Ind.

HUNT LEWIS, industrial designer, 180 East California St. Pasadena 2, Calif.

RENDU, free lance rendering, Room 200, PSNA Building, 400 North Third St., Harrisburg, Pa. *(Continued on page 78)*

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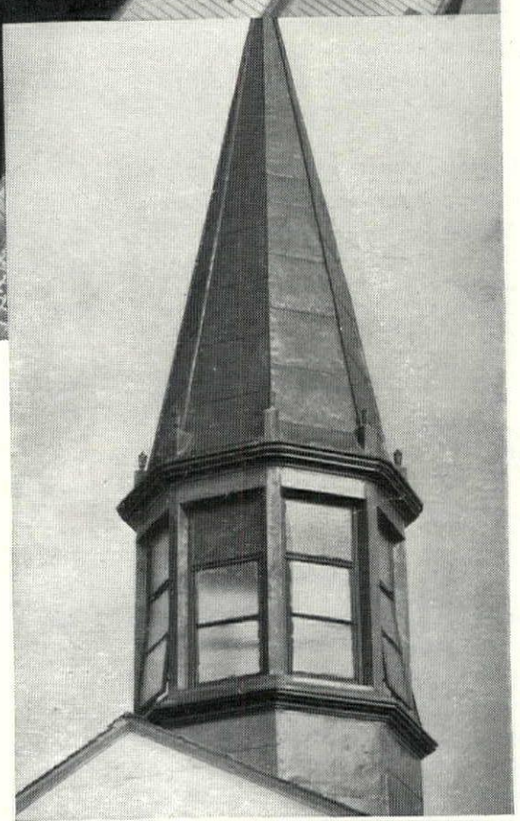
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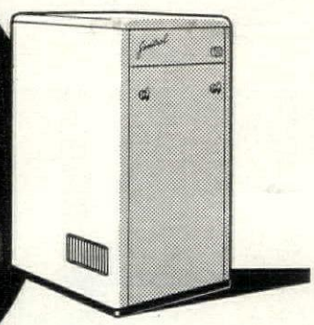
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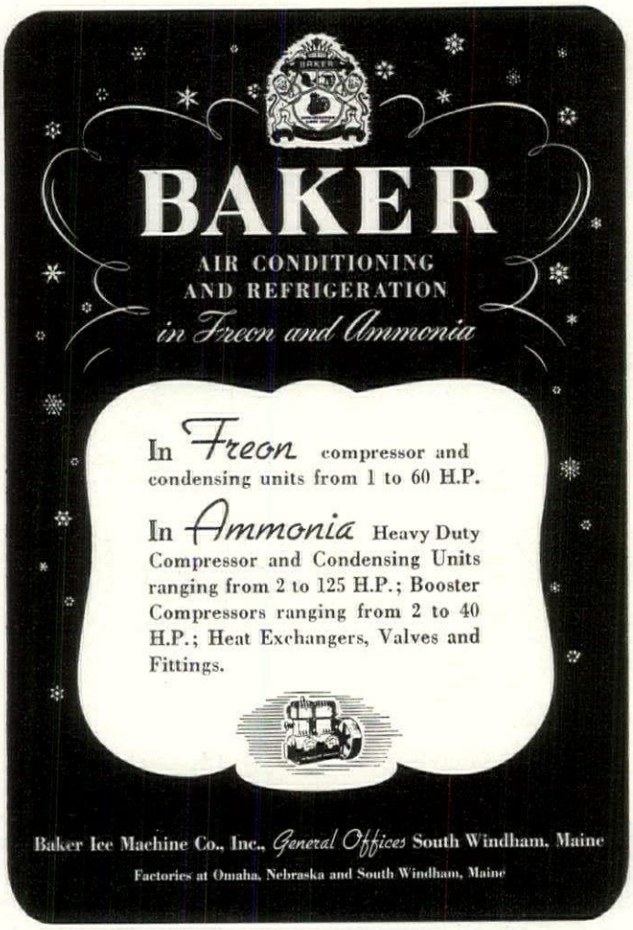
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ANNOUNCEMENTS



CHANGES OF ADDRESS

C. A. SMITH & ASSOCIATES, architects, 315 N. Jackson Street, Albany, Ga.

JOHN HANCOCK CALLENDER, architect, 280 Madison Avenue, New York 16, N. Y.

GOSTA SJOLIN, architect, 1208 Cleburne Avenue, Houston 4, Tex.

PETROFF & CLARKSON, architects, 132 East 58th Street, New York 22, N. Y.

INGRAM S. CARNER, architect, 71-11 Austin Street, Forest Hills, Queens, N. Y.

SID BERSUDSKY & ASSOCIATES, industrial designers, 539 King Street West, Toronto, Ontario, Canada.

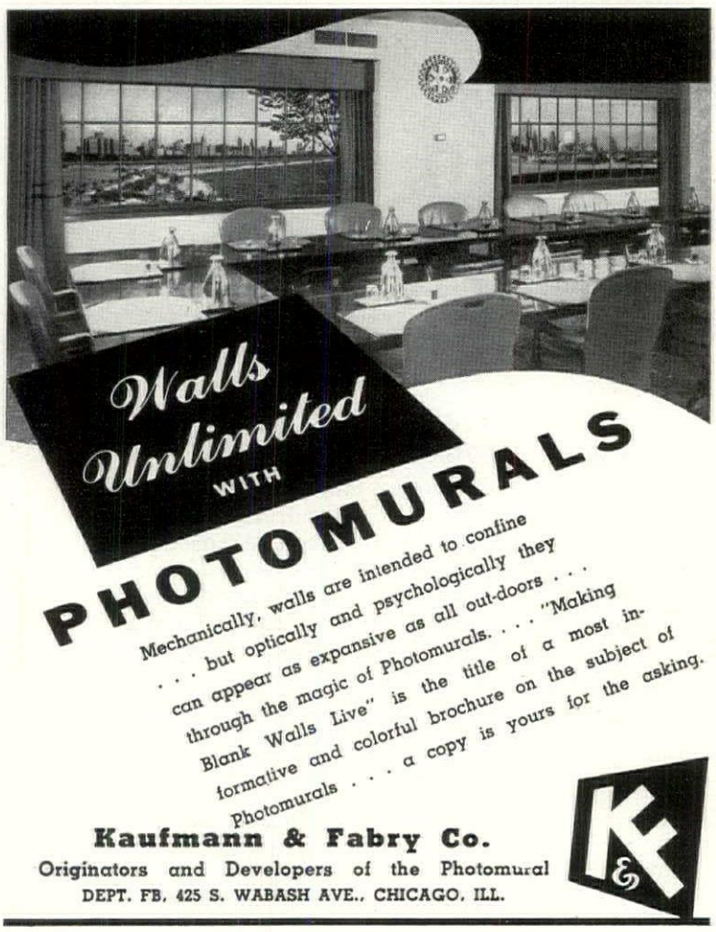
ALBIN GRONOWICZ, general contractor, 11685 Mount Elliot Avenue, Detroit 12, Mich.

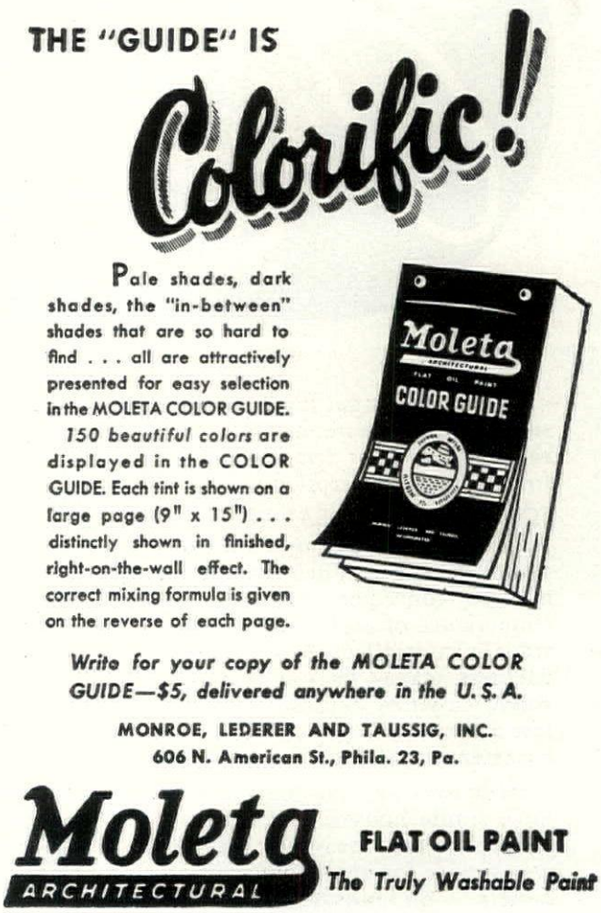
ROSS & WALTON, architects, 3510 Rhode Island Avenue, Mount Rainier, Md.

CORRECTIONS

We regret that the very dramatic design for a radio studio pictured on p. 130 of the November '48 issue of the FORUM was not properly credited. The caption should have read CBS network (not ABC).

On p. 90 of the same issue our announcement of Theodore Hartman's new office should have read "formerly *of* Howe & Hartman."

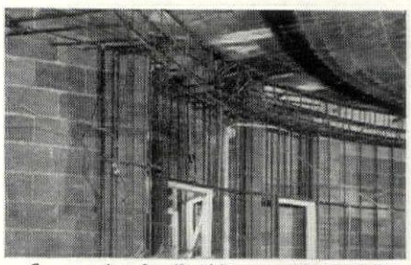




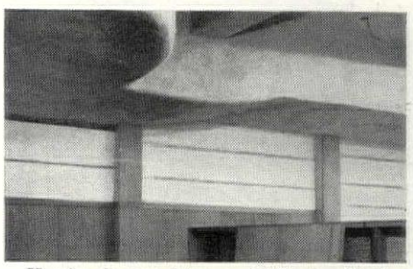




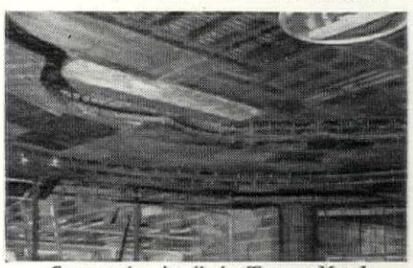
Truscon Metal Lath suspended ceiling partially covered with sprayed asbestos.



Construction details of Truscon Metal Lath ceiling and Cold Rolled Channel furring.



Heating ducts and beam, with Truscon Steel Lath base, covered with sprayed asbestos.



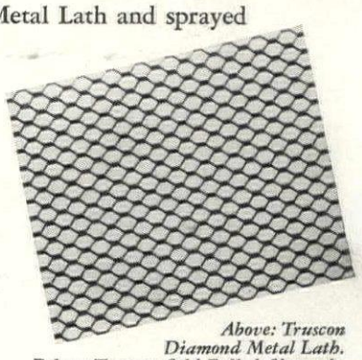
Construction details for Truscon Metal Lath and plaster center recession.

a modern masterpiece

in architectural design and acoustical engineering . . . achieved with the aid of Truscon Diamond Lath and Cold Rolled Channels

The Fairview Village Shopping Center, located in suburban Cleveland, is a new business development consisting of 40 stores of varying sizes, bowling center, and theatre.

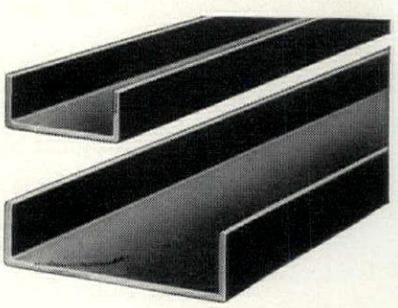
In the bowling center and theatre, Truscon Diamond Metal Lath and sprayed asbestos were used in ceiling construction to attain a high degree of sound deadening and non-echoing. Truscon Diamond Lath and plaster furred construction were used in the theatre foyer. Truscon Cold Rolled Channels were used extensively to give rigid, fire-resistant construction.



Above: Truscon Diamond Metal Lath.
Below: Truscon Cold Rolled Channels.

Truscon Diamond Lath is a flat metal lath, uniformly expanded throughout the entire sheet. Its use is almost universal, for it is adaptable for practically all classes of work—as a base for walls, partitions, ceilings, as a reinforcement for stucco, as a protection for steel beams and columns, and for protecting hazardous points in wood frame construction.

Truscon Cold Rolled Channels are strong, straight and true metal members, with square corners that prevent rolling.

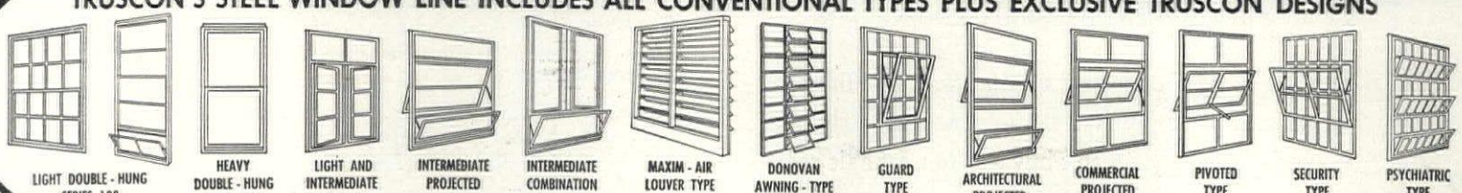




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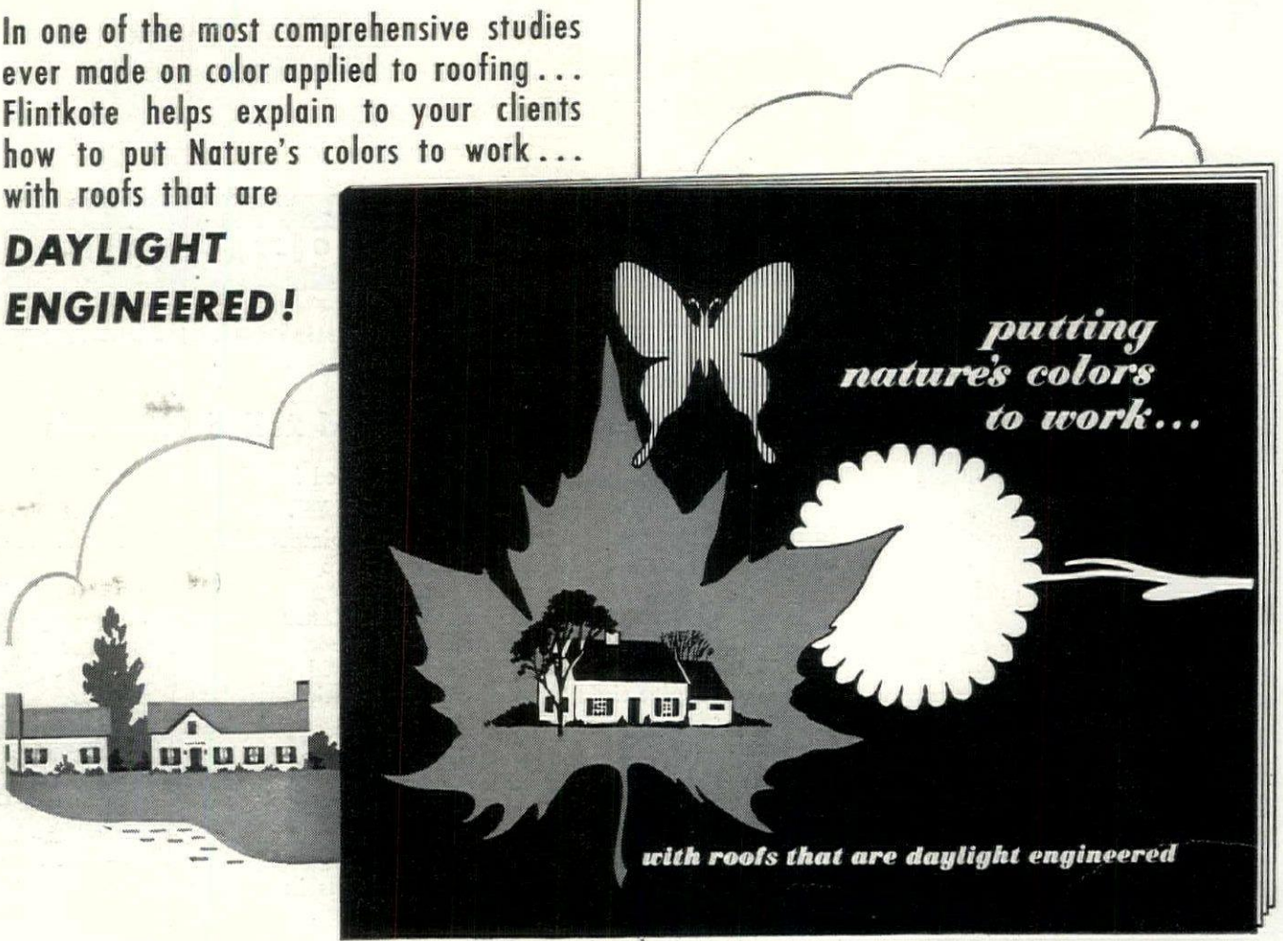
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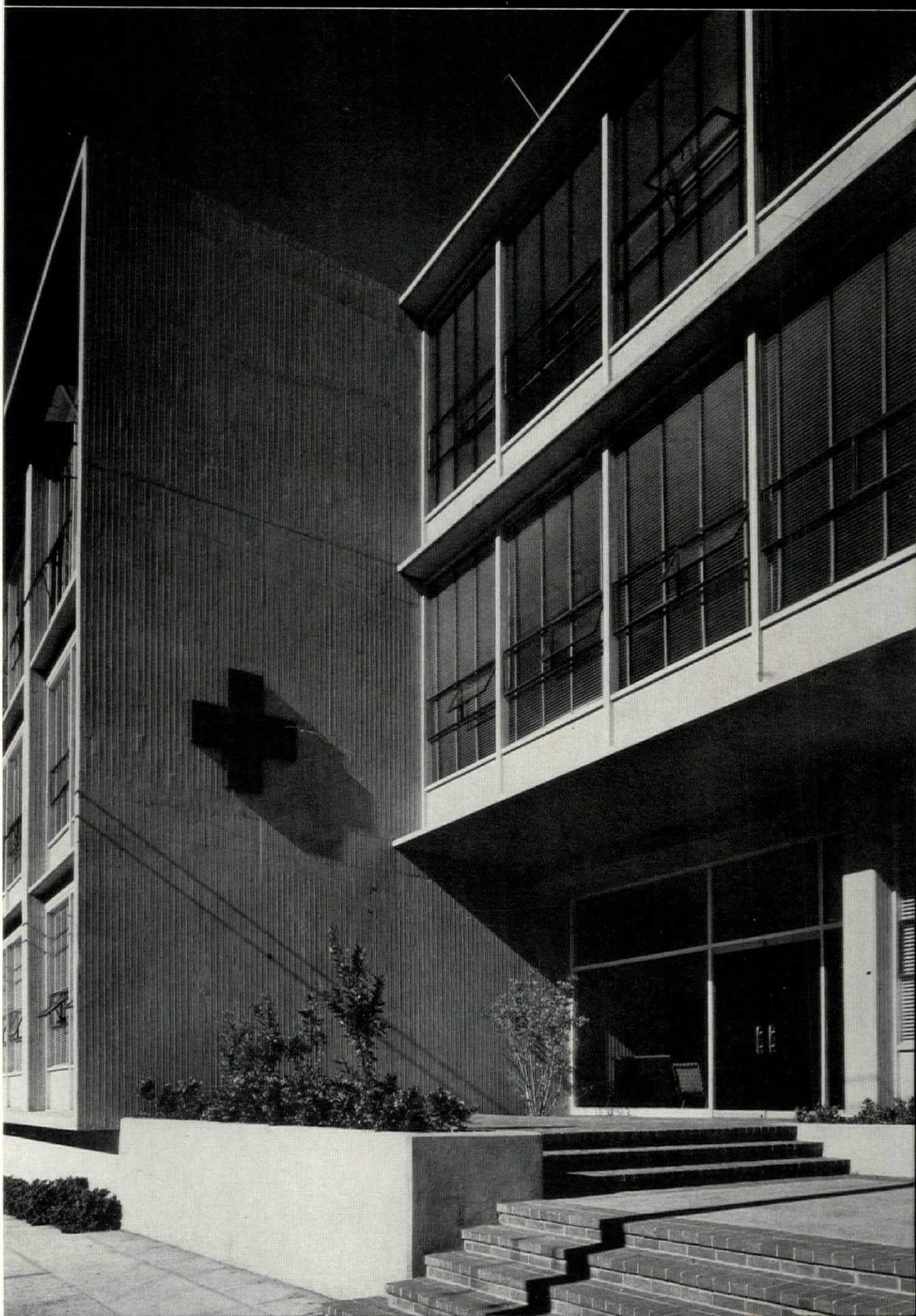
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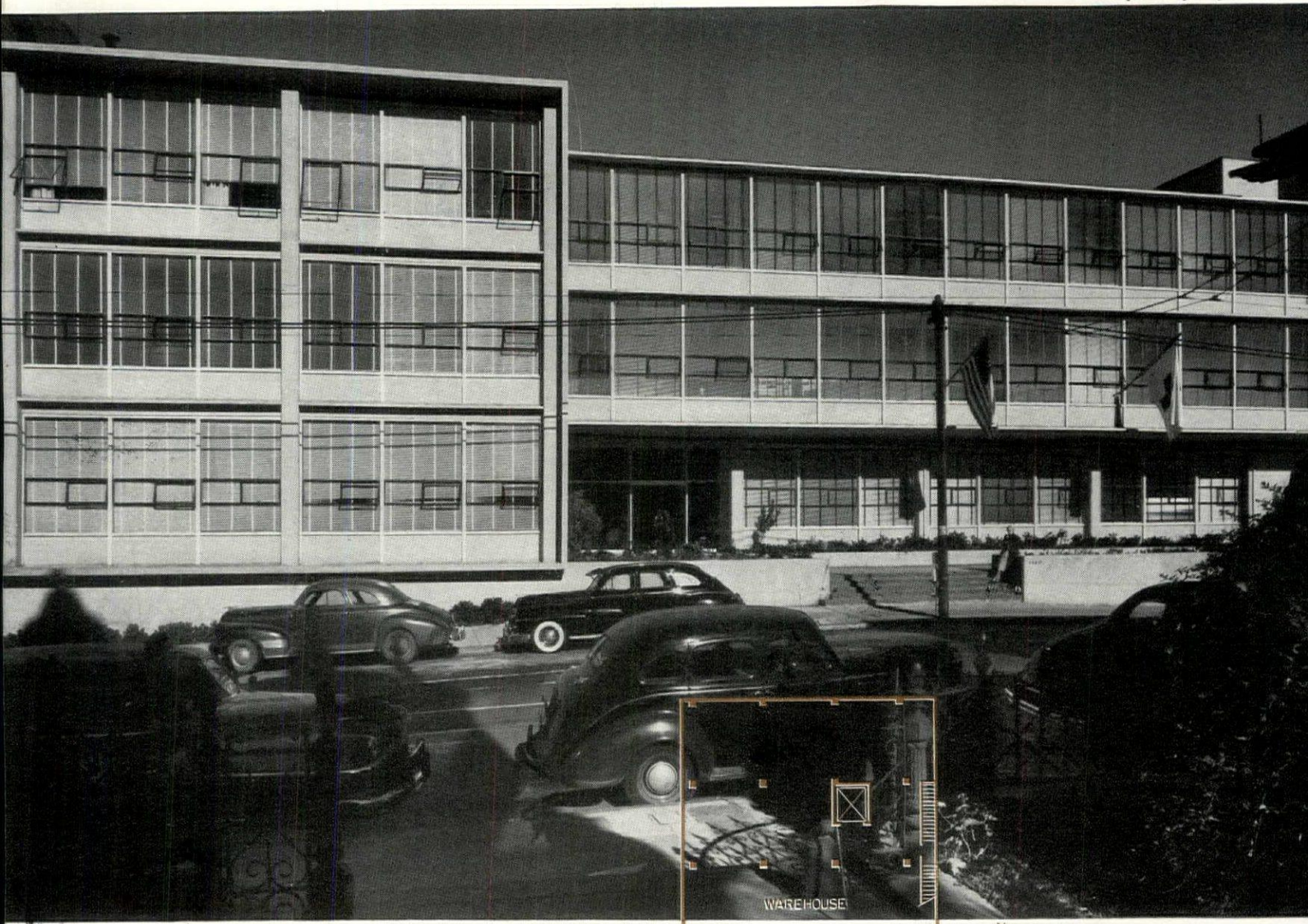
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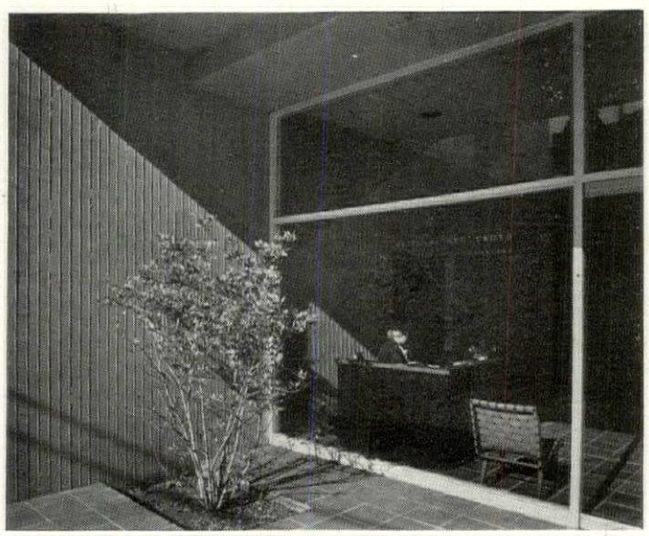


SS AND TEXTURED
CONCRETE CLOTHE
IS RED CROSS BASE
IN SAN FRANCISCO

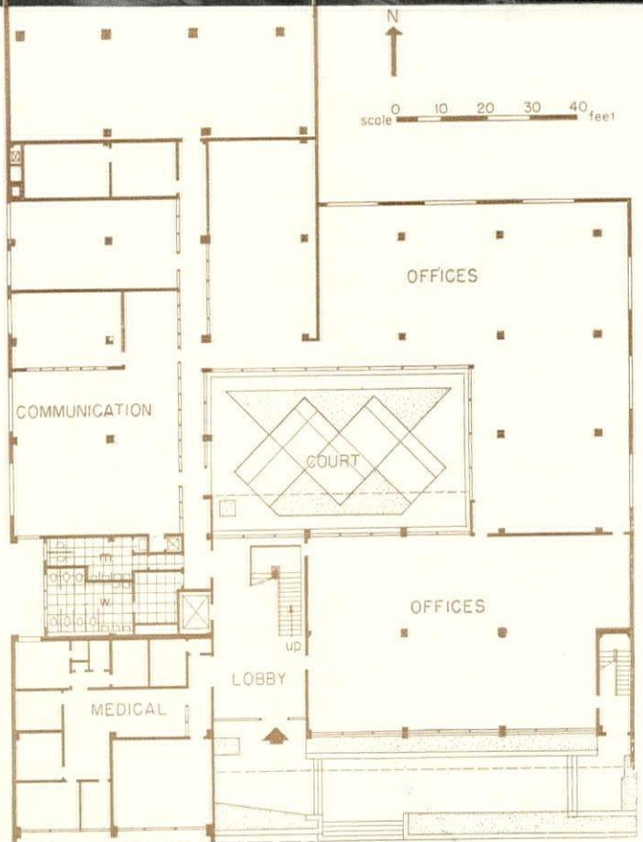
WEST COAST HEADQUARTER

All photos by Roger Sturtevan





LOBBY WALL—REMOVABLE SCREEN BLOCKS WINTER SUN



FIRST FLOOR

American Red Cross consolidates in a new regional administrative home to cope efficiently with its task

GARDNER A. DAILEY & ASSOCIATES, Architects
WALTER T. STEILBERG, Consulting Engineer and Architect
DOUGLAS BAYLIS, Consulting Landscape Architect
WINERTON & WALBERG, General Contractor

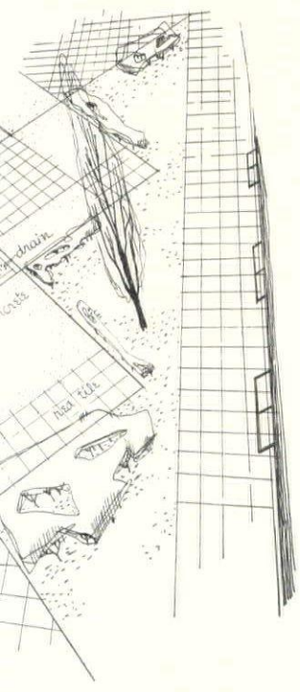
Red Cross Headquarters in San Francisco, important West Coast administrative center for the wide-flung emergency relief agency, were until recently scattered in 20 different commercial office buildings up and down the city of hills. They are now consolidated efficiently into this single tax-free building, whose design has two familiar basic architectural characteristics, simplicity and ruggedness.

Economy was a motivation in each of these. Although the Red Cross is mighty, it cannot be profligate. The eventual unit cost of the building, complete—$9.75 per sq. ft., $.80 per cu. ft.—was a factor constantly present in the planning. The administrators wanted, and got, an impressive physical plant for that money. They have a highly efficient and durable structure, excellent for their particular brand of routine office work, and beyond that a structure built strongly to resist fire and earthquakes.

The building wears its Red Cross well. Its gleaming glass and warm gray textured concrete walls are reassuring in their obvious efficiency, without pomp. The construction, with its simple concrete and glass walls, owes much to local climatic conditions for its success; architects in other areas must hesitate before solving problems so simply. Little space on the lot is unused. The building covers most of the property, spread out around a central court which brings daylight and sun to the interior areas. About 280 workers operate within, in normal situations. The entire floor area, except a warehouse section, is panel heated.

All exterior walls are glazed with panels of fixed glass in wood frames. The end of the cantilevered slab projects beyond the glass wall, except on the first floor approach, where it is set back to the line of columns to afford shelter and increase the area of the entrance court garden. The main stairway was deliberately made inviting, to distract attention from the fact that the budget provided only one elevator.





CENTER COURT (LEFT) IS VISIBLE FROM ENTRANCE LOBBY (BELOW)



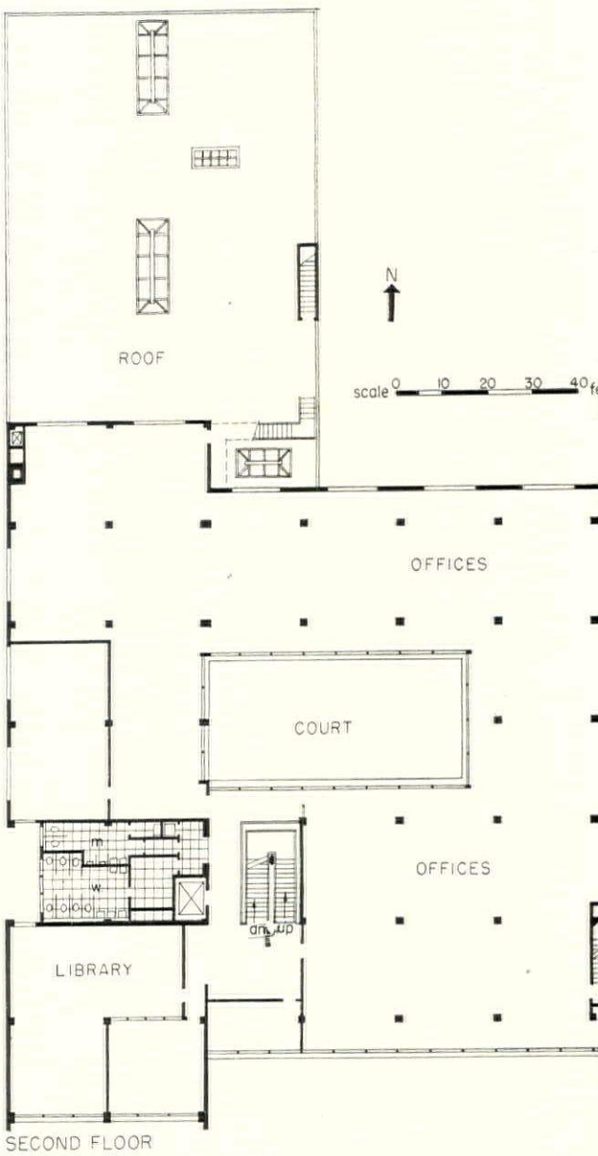
An open



INNER COURT HELPS TO LIGHT OFFICES, WHICH ARE PLANNED WITH THE DESK OF STANDARD SIZE AS A MODULE

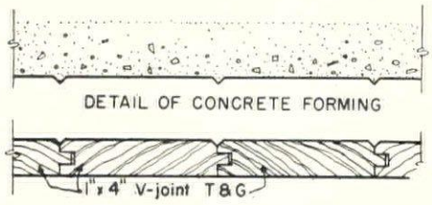
STRUCTURE OF STAIRWAY IS INDEPENDENT OF OTHER WALLS, FLOORS

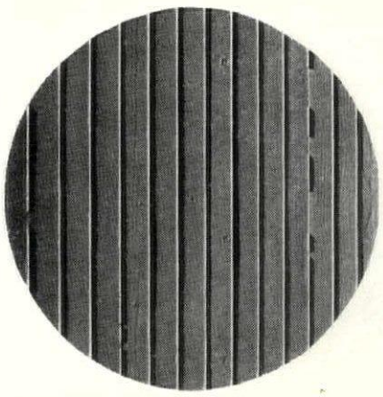




SECOND FLOOR

glass areas, and simply finished concrete construction characterize this building

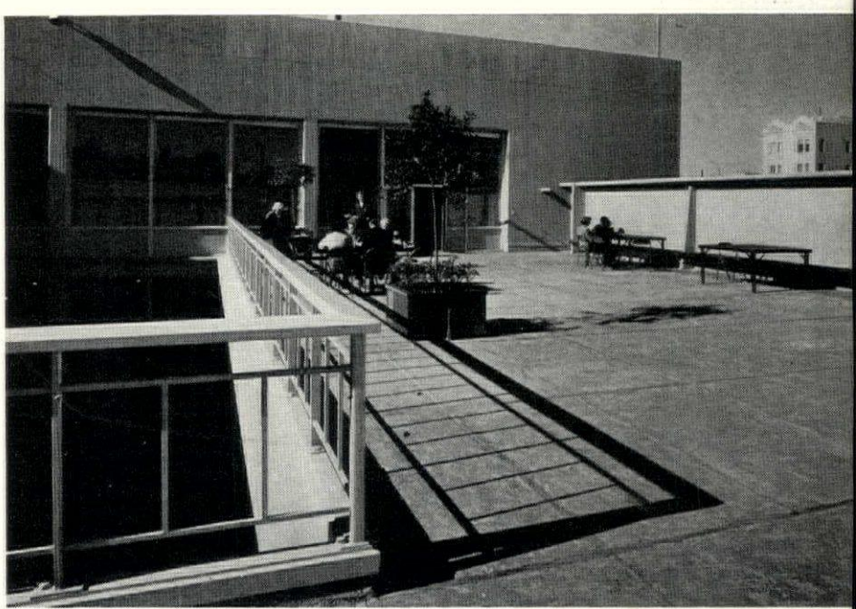




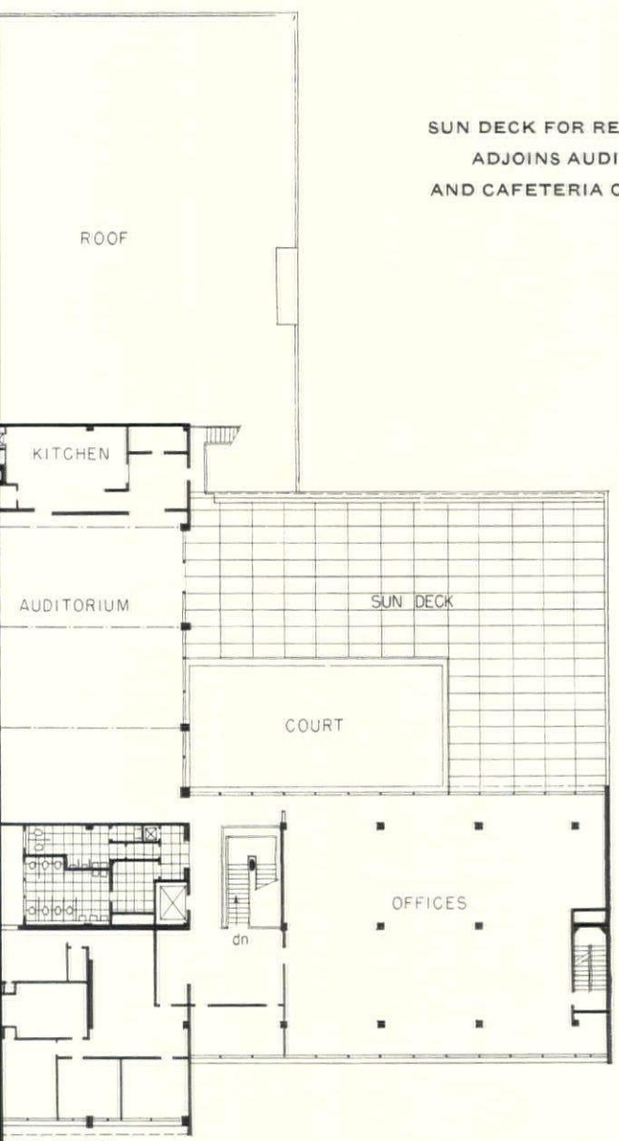
Exterior forms for the reinforced concrete structure were made of 1 x 3 in. V-joint tongue-and-groove set vertically. On removal this left a fine vertical ribbed texture on the surface. All concrete was vibrated, since almost all is exposed. Interior forms were Douglas fir plywood set in 4 x 8 ft. vertical sheets, leaving a smooth exposed surface for painting. No plastering was done.

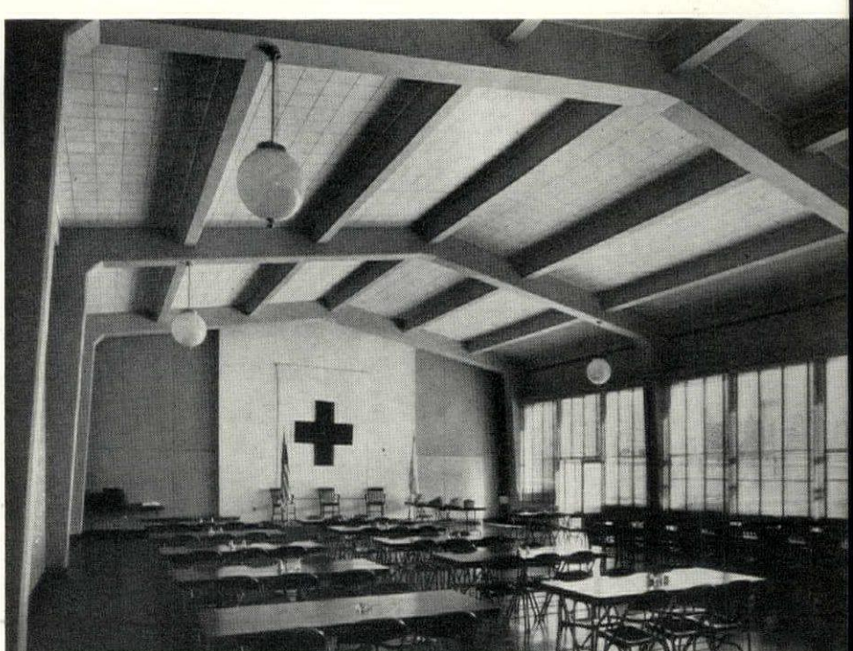
Office planning is very open, because most of the desk occupants are in charge of local Red Cross chapters or activities which must be coordinated, making free exchange from desk to desk essential. Office ceilings are perforated acoustical tile. Walls are painted in varying colors against a basic warm gray. Occasional greenish yellow, terra cotta, or dark green help keep the atmosphere alive, and black lacquer trim accents the scheme. Venetian blinds also are in varied colors. Columns are set back from the window wall the distance of one desk, for flexibility in layout.

The auditorium was placed on the top floor slab so that its broad span and high ceiling would not complicate the structure. Most of its use is as an employee cafeteria at noon.



SUN DECK FOR RELAXING
ADJOINS AUDITORIUM
AND CAFETERIA ON ROOF





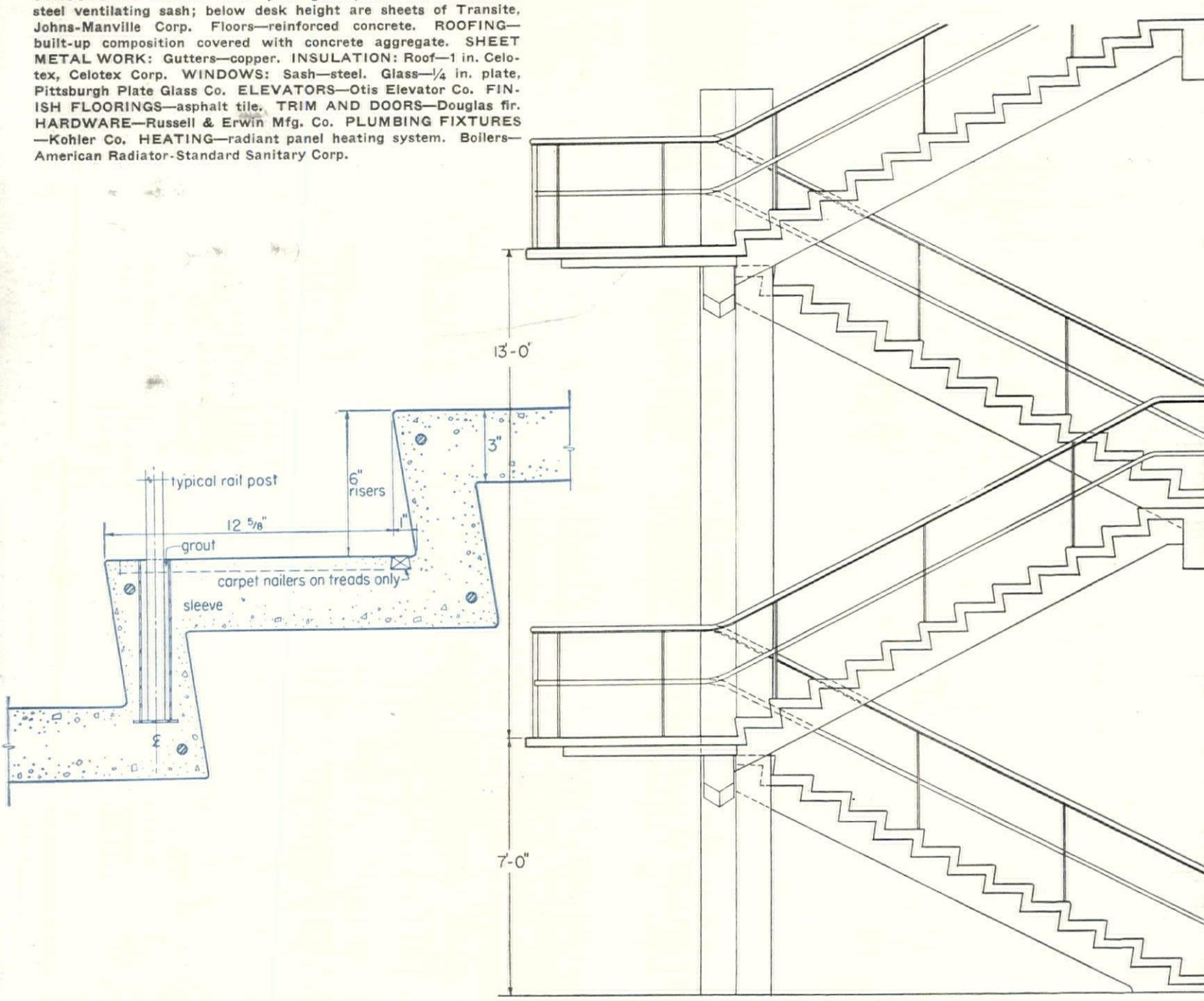
Interior and exterior concrete cantilevers add elegance to a utilitarian structure

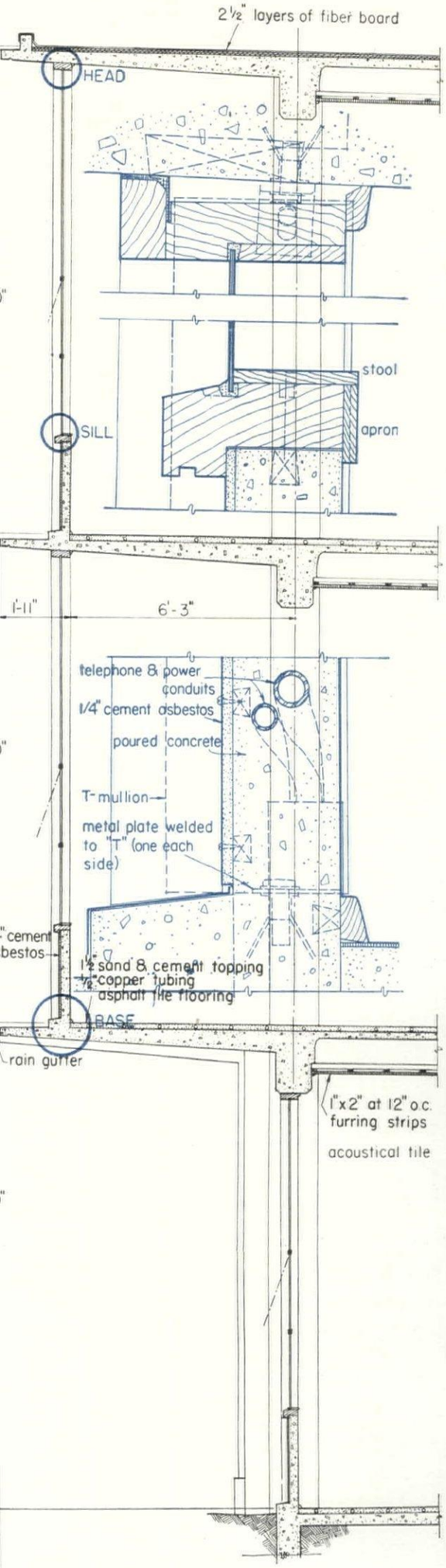
The independent cantilevered stairway is an interesting design element on each of the building's floors. It balances on a central column without touching the wall, and joins the floor slabs, with reluctance, only when entirely necessary to justify its existence as a stairway. The space saved by this same construction in the first floor lobby is particularly valuable.

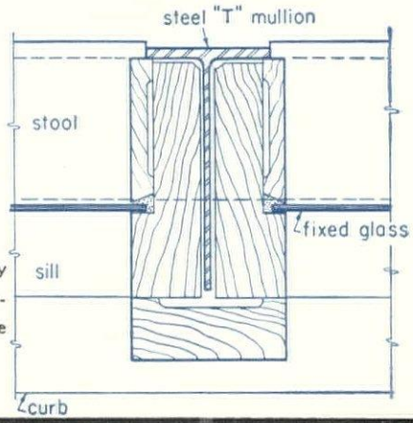
Floor slabs reach out beyond columns as tapered cantilevers to carry the building's vertical panels—principally glass. These vertical wall panels are supported by wood mullions strengthened by a light steel "T" bar anchored at the floor and at the ceiling. Trim bands of steel ventilating sash are set in the fixed plate glass, and below desk height the spandrels are concrete, poured in place and finished on the exterior with sheets of Transite, which is held in place by brass screws and washers. The heating coils, floor-embedded, use 60,000 ft. of ¼ in. soft copper tubing.



CONSTRUCTION OUTLINE: Foundations — reinforced concrete. **STRUCTURE:** Exterior walls—plate glass panels set in bands of steel ventilating sash; below desk height are sheets of Transite, Johns-Manville Corp. Floors—reinforced concrete. **ROOFING**—built-up composition covered with concrete aggregate. **SHEET METAL WORK:** Gutters—copper. **INSULATION:** Roof—1 in. Celotex, Celotex Corp. **WINDOWS:** Sash—steel. Glass—¼ in. plate, Pittsburgh Plate Glass Co. **ELEVATORS**—Otis Elevator Co. **FINISH FLOORINGS**—asphalt tile. **TRIM AND DOORS**—Douglas fir. **HARDWARE**—Russell & Erwin Mfg. Co. **PLUMBING FIXTURES**—Kohler Co. **HEATING**—radiant panel heating system. Boilers—American Radiator-Standard Sanitary Corp.







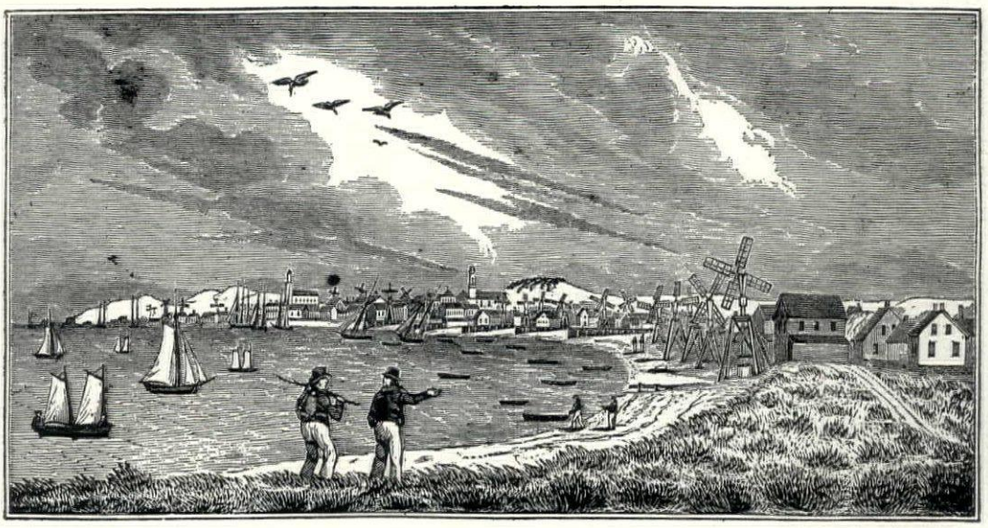
Wood frame is reinforced by steel T-section welded to anchor plate bracing structure horizontally at base





THE CAPE COD COTTAGE PART 1.

Twentieth Century America's most popular house design is a product of wind, sand, storm and the colonial shipbuilder's craft.



Provincetown, Mass., 1839 from Barber's Historical Collections

an architect from Mars were to take a cross untry jaunt along the old Grand Army highway, w U. S. route 6, starting in lush, semi-tropical alifornia and ending on the sandy, windswept hook Cape Cod, 70 miles out in the Atlantic Ocean, he ould be struck by the persistence, throughout his urney, of one particular building type. From Los ngeles east across the arid plains of Nevada and tah, up the jagged edge of Colorado's Rocky Mountins, zigzagging through the flat farm lands and iddletowns of Nebraska and Iowa into the suburbs giant Chicago and Cleveland; across the piney p of the Allegheny Mountains in Pennsylvania d northern New Jersey to Bear Mountain on the udson, through the small, industrial towns of Conecticut and Rhode Island and up again into Massausett's rolling Berkshire Hills, flattening finally ward the ocean, he would see, over and over again small, white, box-like house with a pitched roof d shuttered windows. During the last 70 miles of s journey, from Sandwich to the tip of Cape Cod, would see the house in its natural habitat, tucked hollows far off across the sand dunes, poking from hind a patch of shrub oak and clustered with its llows along every village street. Twentieth century America's most popular house design, now attered throughout the entire country, is the Cape od Cottage, 280-year-old native of a narrow strip sea-washed sand, the folk product of a handful colonial settlers.

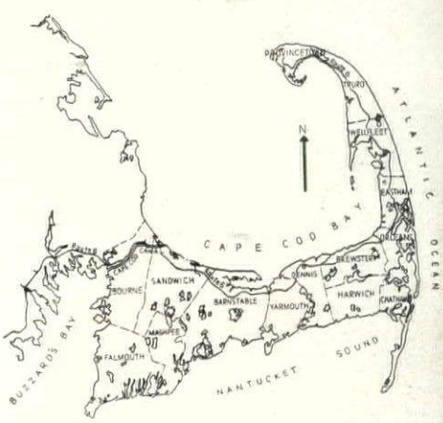
The Cape Cod Cottage is an indigenous outgrowth its harsh, natural environment and of the craft ciety of early America. As such it is a rational lution to the myriad problems of house design, ldom matched in the history of architecture. Within e rigid limits prescribed by climate, topography d by available materials, tools and techniques of ilding, the Cape settlers evolved a simple, shipape dwelling free of any gadgetry which did not d to its function as a shelter.

This small, neat cottage remained the prevalent cal building type from the woodworking era of the e 1600's until its final defeat by the "stove age" the middle of the nineteenth century. In Sandwich and other villages on the shoulder of the Cape, the influence of the nearby mainland prevented it from becoming a universal style. As one traverses the arm of the Cape, however, two-story colonials decrease and the 1½-story cottage grows more numerous. In Provincetown, the farthest and most isolated Cape settlement, there was not a two-story house until 1820.

To understand the Cape Cod Cottage, it must be considered as a "land craft," built by ships' carpenters to ride the shifting sands and withstand lashing northeasters just as its sister schooners rode out ocean waves and storms. It is, for instance, no accident that the authentic Cape Cod is low and broad of beam, a 1½-story box measuring 39 x 28 ft. with only 7 ft. ceilings—a completely different proportion from the smaller, taller modern copy; nor that its dormerless roof is broad based, forming a sturdy 90° angle. The roof slope is, of course, an excellent rain and snow shedder. Even more important, such a low-slung mass, without projections of any sort, could resist the driving force of ocean winds while a building with high, flat surfaces might be demolished. A short hoist and a long peak is the native description of these contours.

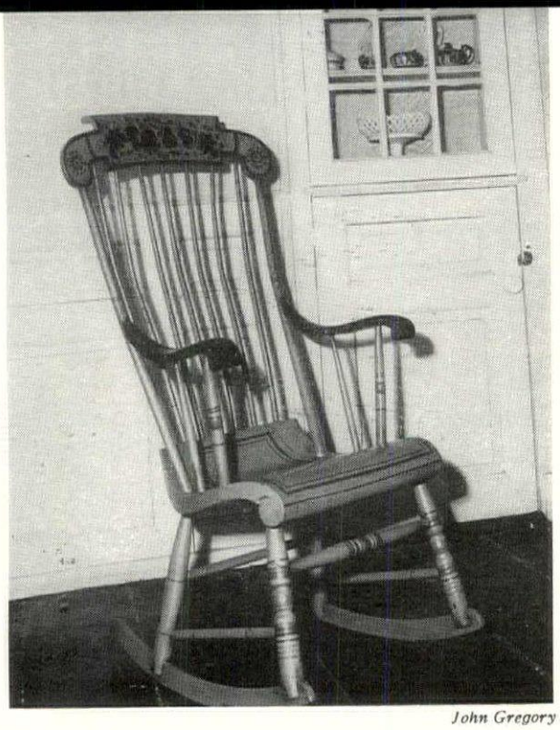
But weather is not the only enemy. Cape sands blow and drift like snow. Thus, the early houses had no foundation whatsoever, but rested on huge, hand-hewn oak sills which balanced the sturdy bulk on its treacherous site like a ship riding the waves. This type of construction, inspired by the sand, would be impractical wherever sand is not, because of the problem of drainage; but here the sand base acted as a blotter for moisture and storm water. The picket fence which modern copyists find so charming was also an extremely functional item. It kept out the sand drifts which might otherwise (and in extreme cases did anyway) inundate the house.

Perhaps the most important feature of the Cape cottage, however, is its anchor. This mainstay against storm and shifting sand is a massive chimney block in the dead center of the house, around which all the rooms are organized. In addition to providing needed ballast, this masonry core was a compact "utility

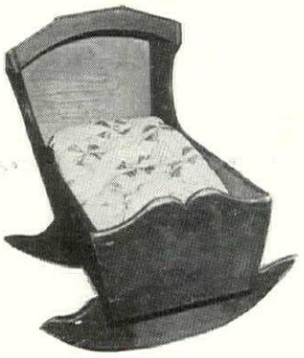


"Cape Cod is the bared and bended arm of Massachusetts."
Henry David Thoreau

ssic Cape Cod Cottage on Truro's rn Hill where the Pilgrims first discovd Indian maize. (Photo, John Gregory)



John Gregory



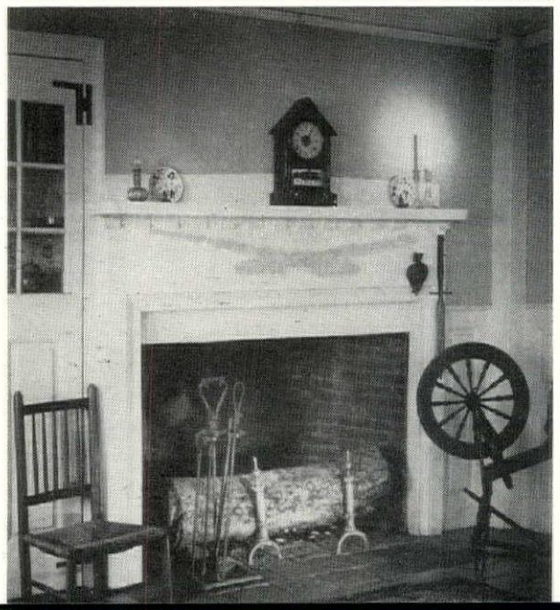
Homemade cradle and artisan-made chair represent two aspects of Cape Cod's handcraft tradition. The chair is painted in a typical mustard color and decorated with deep mulberry, blue and gold. The cradle is earth brown, lined with brilliant turquoise blue.

Photo by Haskell



Many original Cape Cod fireplaces were replaced by stoves in the 1840's. This kitchen fireplace is smaller than the mammoth cooking places of earliest days, but still retains the built-in oven. The parlor fireplace was never large. Note typical white wainscoting, fireside cupboards, Holy Lord hinges and the corner post in the parlor, visible because of thin wall construction.

John Gregory



unit" for heating and cooking and acted as a brace for the steep, companionway stairs.

The typical Cape house contained three major ground floor rooms: two small square ones at front, flanking the chimney well and a larger rectangle at rear. Thus each room had its own fireplace, the only means of heating in colonial days. Rooms were small because fireplaces could not heat an extensive area.

The front entrance to the house was in the center, facing the masonry core and the stairs which it supported. A tiny vestibule provided circulation to both front rooms and to the upper story. Windows—two on either side of the door to serve the twin front rooms; an equal number flanking the back door; two at each downstairs end of the house, giving one apiece to back and front rooms; one to four upstairs at each gable end—were extremely small against the chill winter storms. Their "quaint" shutters represent an early form of storm sash, easily adjustable to fair weather or foul. Some families substituted for shutters an inside wind board which could be pulled to in a blow without opening the window.

Most houses faced directly south in order to gain the warmth of winter sun, but more importantly as a means of telling time. When the sun's rays came straight in the front windows, hitting the marker on the floor, it was 12 o'clock noon. Another small but important point was the triangular grooved rain trough inside the front door which directed driving storm water to a small hole in the floor and thence through to the absorbent sand. The round brick root cellar under the kitchen for storing winter vegetables was also shaped with a reason: its circular form prevented sand from pressing in the wall.

Houses were necessarily built of wood because of the almost complete absence of usable native stone. But in any case this construction was best suited to the moist, saline atmosphere which turns masonry houses into damp, clammy cellars. Furthermore, the abundance of salt in the air acted as a natural preservative to shingled exteriors which, in the earliest houses, were allowed to weather unfinished to a soft, silvery gray.

Wherever possible houses were shielded from the blasts of wind and sand by placing them behind a hillock or a patch of trees. Often, however, an originally good site bade fair to blow away. In such cases the lack of foundation and the sturdy box-like construction were an added boon. The house was simply trundled across the dunes to a more promising locale. This mobility of Cape houses also made it possible to move one's establishment to keep pace with shifts in business. When whaling declined in Provincetown during the early 1800's, many homes were loaded onto rafts and floated across the bay to other villages. A number of houses on the south side of the Cape are not native houses at all, but were floated from Nantucket Island when the whaling trade died out there.

Psychologically, the Cape Cod Cottage was more than an extremely efficient shelter. Against the roaring ocean which could be heard miles inland, against the storms which periodically descended on the Cape like a testy giant, and against the dangers of seafaring life, it stood, an

enclosed, protective haven, shutting out all hostile elements from the snug family circle.

IT has been said that every son was worth £ 100 to an early Cape family and every daughter £ 50. Large families, each member of which helped in the home production of food, clothing and furniture were indeed the basis of Cape Cod society in those days and it was around this closely knit group that the cottages were planned. Room division was therefore based on the need for one large area which could serve as kitchen, workshop and general living quarters. This is the long rectangle at the rear of the house. At the left end of this room was a small buttery and pantry, at right a tiny supplementary bedroom or two. The small front rooms were "company parlors," kept spic and span for the minister's call, important visitors or funerals, but never heated unless the occasion demanded. One was sometimes used as a guest or master bedroom, but usually the parents confined themselves to the small kitchen bedrooms or to a space partitioned off on the upper floor. The 1½-story box, which gained an extra half floor simply through the slant of the roof was, of course, the thriftiest possible house shape. In early days this "attic" was simply left open as a dormitory with straw pallets or trundle beds for any number of children. As the family expanded—and some had as many as 26 offspring—even tight packing did not provide enough upstairs sleeping space. Lean-to ells were then added at the back or side, sometimes connecting house and barn and serving as a covered passageway in winter. The summer kitchen, a necessity because of the stifling heat of these houses during warm months, was also an early addition. Houses were always expanded out and never up. Besides presenting the least possible wind resistance, this system was feasible because of cheap land in the colonial period.

The center of family life, however, remained the large, back kitchen. Here, the entire crew gathered during winter days, mending nets and fishing tackle, spinning the year's supply of thread, weaving cloth, making bed linen and clothing, turning and painting wooden chairs and benches. Here was the huge, main fireplace with its built-in brick oven and long iron crossbar (or later the swinging crane), equipped with trammels for hanging pots. Six feet wide, and high enough for the housewife to walk into without stooping, it was also a favorite spot for children, who sat in the corners on empty dye vats, beer kegs or the "cubbie seat," studying or whittling. In one corner of the room was the family spinning wheel, in another the loom. A homemade trestle table and chairs, a large chest for storing family valuables and a wooden tub for Saturday night bathing were other stock items. Clothing was hung on a long "peg board," equipped with enough wooden hooks for the entire family. In these primitive houses there were neither bathrooms nor closets and the tight plan does not easily accommodate them.

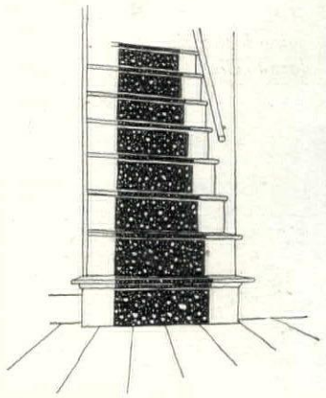
The Cape Cod Cottage, deceptively modest on the outside, was bright and colorful within. Walls were always painted white, and curtains were of white hand-spun linen. This reflective finish counteracted the tiny windows, providing an amazingly bright interior despite the small amount of sunshine which entered. The fondness for natural finishes in antique woodwork and furniture is primarily a modern fashion. Cape chairs, chests and tables made of the locally abundant soft pine needed a protective coating, and they were therefore painted in brilliant reds, blues, greens and yellows and decorated with stylized designs of fruit and flowers not unlike the familiar Pennsylvania Dutch motifs. Floors were either painted in these gay colors and spattered with darker tones or painted dark and spattered bright. This finish was impervious to stain or to the trackings of sand and dirt. Braided rugs in a variety of bright colors added an extra touch of warmth. Contrasting with these gay but homely furnishings were the foreign treasures which Cape sailors brought back from lengthy deep sea voyages. Polished Chinese chests and inlaid porcelain, teak and mahogany from India, silken shawls and perhaps a pair of ivory tusks lent elegance and worldliness to the simple fisherman's cottage. The weather-beaten shingled box contained a wealth of color and richness surprising in so humble a setting.

SUCH was the general structure and appearance of houses, both outside and in throughout the Cape. From this basic design, however, grew several variations on the prototype Cape Cod. One was the "half-house," exactly like its parent but chopped off just beyond the door. Newlyweds often built this house, intending to add the finishing half when children arrived. A still-remaining half-house is supposed to indicate that the people owning it produced no offspring—which would make a large percentage of Cape families childless. Probably the answer is more mundane. When children did arrive it often seemed easier to build an ell toward the back rather than rip off a side partition. Certainly it is true that few full Cape Cods ever grew from half-houses. Three-quarter houses, eliminating only the last window on one side, are another variation. They are perhaps the most common type put up by Cape Codders during the whole cottage period. A rarity, on the other hand, is the double house, two full Cape Cods joined together at the common gable end. These were probably built by already large and wealthy families, or by two thrifty groups who wished to save the price of one end wall. Family finances determined the type chosen.

Other major variations concern the roof. Straight, pitched roofs were the rule. But bowed "shipbottom" roofs and gambrels were occasionally substituted. The bowed roof is a direct offspring of the Cape Cod's liason with local shipbuilders, these men simply applying the technique used in making ships' hulls to the timbers of their land-locked craft. Gambrels cannot be claimed by the pure Cape Cod, for they were a method of providing a full second story. However, the houses which use them boast all the features of the true Cape cottage except its half-size second floor.



Numerous windows in the gabled end indicate that the original open upper floor has been partitioned into smaller units. Most complicated breakdown is the one shown above: six rooms with a miniscule space under each eave, for children, flanking two adult bedrooms. Of this house, which belonged to a Wellfleet oysterman, Thoreau wrote in 1860: "The great number of windows . . . struck us agreeably—as if each of the various occupants who had their cunabula behind, had punched a hole where his necessities required it, without regard to outside effect . . . The ends of the house thus had as many muzzles as a revolver . . ."



Stairs were almost as steep and narrow as a ship's companionway. Spatter paint finish protected the surface at point of greatest wear.



Grooved rain trough directs Cape storm water (which no door, however tight, could keep out) through floor to the sand below the house.

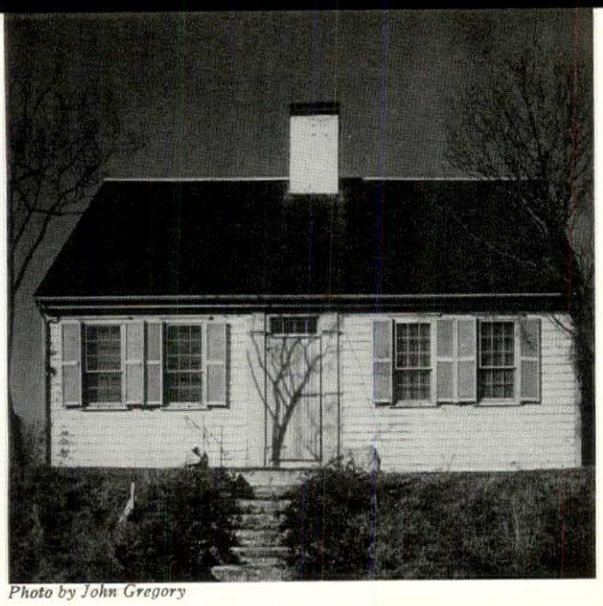
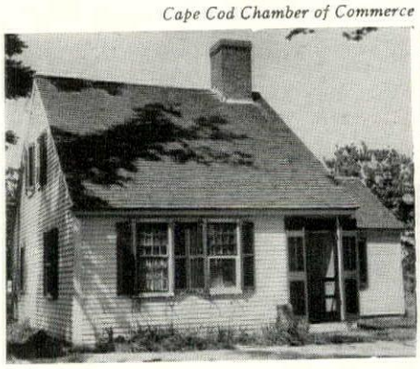


Photo by John Gregory

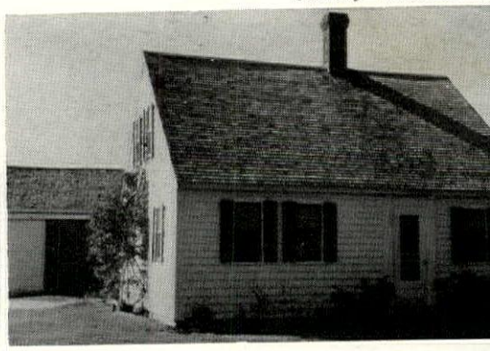
FULL SIZE HOUSE

Cape Cod Chamber of Commerce



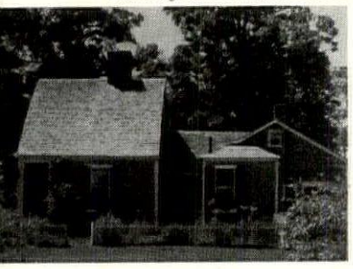
HALF HOUSE

Courtesy—Donald Doane



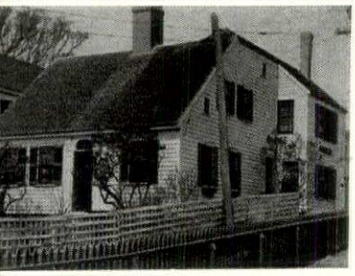
THREE-QUARTER HOUSE

Photo by Samuel Chamberlain



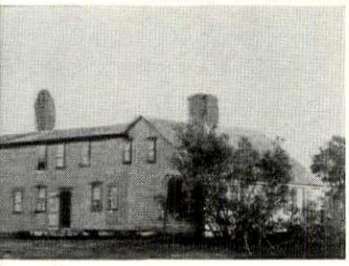
HALF HOUSE has expanded toward the side with numerous lean-to ells.

Courtesy—Mrs. M. C. M. Hatch



THREE-QUARTER HOUSE shifted rear roof line from pitch to straight and added a two-story ell.

Courtesy—Donald Doane



WHOLE HOUSE grew to hotel proportions by building summer kitchen, topping it with numerous bedrooms.

THE era of the authentic Cape Cod Cottage extends roughly 170 years from 1670 to 1840. During this period certain minor variations such as the Greek revival influence in door columns and cornice were introduced, but the basic design remained the same. The persistence of one building style for such a length of time is extremely unusual, and is paralleled by no similar continuity of design on the mainland. The answer lies in the homogeneity of Cape society during this period. The Cape Cod Cottage is essentially a fisherman's cottage and its years as a common building type are also the Cape's years as a popular whaling, fishing and shipbuilding center. Before 1670 the major pursuit of the early settlers was farming. By 1840 the big shipbuilders, the big fishing fleets, the Liverpool Packets and the great Clipper ships had arrived. In the early days of settlement, the Cape had not yet found its natural calling; without fishing there were no shipbuilders and without shipbuilders—local artisans who loved wood and knew their craft—the fine timber structure and delicate joinery of the Cape Cod Cottage were impossible. In the boom period of the nineteenth century emphasis turned from fishing to mercantile trade and from small individually owned craft to larger ships and fleets, bent on profits for a few powerful owners. Class distinctions between captain and crew became more pronounced and the wealthier men began to build impressive mansions.

It is the theory of certain historians that a fishing culture is an excellent breeder of democracy. Like most generalities, this is both true and untrue. Given the conditions which prevailed in Cape Cod during the eighteenth century—a homogeneous society in which everyone either fished or worked at related trades and no one made much money—this is at least partially the case. Certainly the Cape Cod Cottage, as a mirror of its culture, proclaims it so.

Several factors were important leveling agents in Cape society. Except for Provincetown, Cape Cod had no harbors deep enough to handle larger than fishing schooners. Thus, the wealthy shipowning and merchant class which got an early start in Boston, was almost unknown on the Cape. Even with the advent of the clipper ships in the nineteenth century, few Cape Codders owned these expensive craft, but captained other men's ships and sailed from other ports. During the earlier fishing era, small boats, shared ownership and profits—and small houses—were the universal custom.

Isolation from the mainland and lack of harbors also prevented the growth of large cities with their more sophisticated society. Yarmouth, Wellfleet, Orleans, Eastham—all the Cape towns—were small seaside villages whose inhabitants lived an almost communal existence. Everyone turned to for "house raisings" and "barn raisings" and was familiar with the actual construction techniques involved. The local shipwright, whose province was as much the house as the ship, was sternly watched by his Cape clients; for every inhabitant knew wood and woodworking at first hand. The turning of a homemade chair spindle or the detail of a builder's wainscoting were equally the subject for a craftsman's pride. Neighborly competition grew out of the winter sewing bees which provided the major social life for housewives. Money was not yet the arbiter of social eminence, for the local tavern united men of every income over rum and tall tales. The shifty Cape sands made such abominable roads that as late as 1820 there was no coach service beyond Barnstable and no horses except for a lone specimen at Provincetown and he had only one eye. Thus, even the wealthiest man in town had no equipage, but trudged the sand paths with his poorest neighbor.

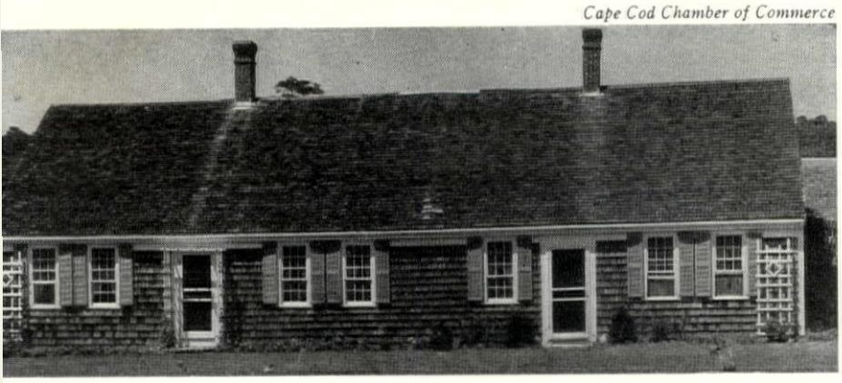
Constant wrecks on the treacherous Clay Pounds of Truro and the back side of the Cape further united the inhabitants. Such disasters, involving the loss of fathers and husbands and often resulting in extreme poverty, could and did visit every Cape family.

Under such circumstances, captains who managed to become wealthy—and there were a few—seldom "put themselves up" with the ostentation of a large house, but lived like their crew in simple, three-room cottages. It would have been hard indeed to buck the custom of these tightly knit communities which considered workmanship a proper area for competition, but "show" merely bad taste. As late as 1850, a Mr. Willis from Boston cast a surprised and superior eye on this phenomenon, reporting:

"Cape Cod residences have a peculiarity . . . They present a direct contrast to any other portion of our country. The houses and their surroundings seem of an unsuitable inferiority of style to those who live in them . . . Few dwellings on the Cape cost over a thousand dollars,* yet there are many wealthy men who live in houses of this cost . . . men, too, whose families are highly educated, and whose sons and daughters visit and marry in the best circles of

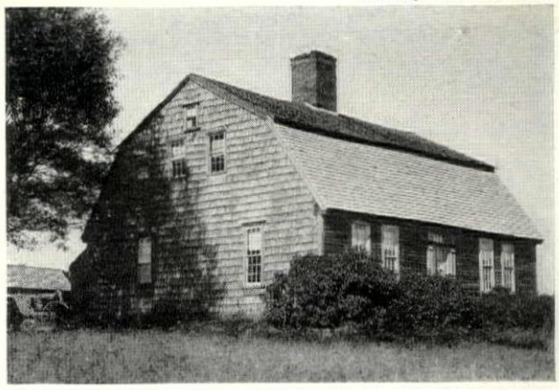
* In the 1700's the cottage could be built for only $200-$300.

Cape Cod Chamber of Commerce



DOUBLE HOUSE

Courtesy—Donald Doane



GAMBREL ROOF took house out of cottage category by providing a full second story. Otherwise construction and style were typically Cape Cod. Windows in this house were equipped with inside wind boards rather than shutters.

ociety in Boston and New York . . . There is . . . a emarkable republican simplicity in the style of uildings; little distinction that betokens wealth; an quality that extends to everything."

Religion was another important factor which prevented ostentation in dwelling or personal adornment. The harsh discipline of the early Congregational Church, founded by the Pilgrims in Plymouth, were an integral part of early Cape life and emphasized a modesty in temporal matters which was directly reflected in its architecture. Every citizen was compelled by law to belong to the "Orthodox Church," and attend meeting on Sunday. Its influence was the stronger since there was little distinction between church and civil government, parish affairs being conducted in the town meeting and church membership made a prerequisite for voting.

The other side of this strict and godly coin was the suspicion directed at "strangers" or at any nonconformity with established beliefs. The early persecution of the Quakers in Sandwich and Yarmouth as a "cursed sect of haereticks" is famous and many "warnings out" were given to new residents who did not pass the stern inspection of the village fathers. The friendly Cape Indians, too, got short shrift from these worthy settlers. The Sachems were systematically fleeced of their lands for such small change as "2 brass-kettles and one bu. of Indian corn." Among the more prosperous citizens slavery was not uncommon and we find Negroes listed in old wills amongst "household articles."

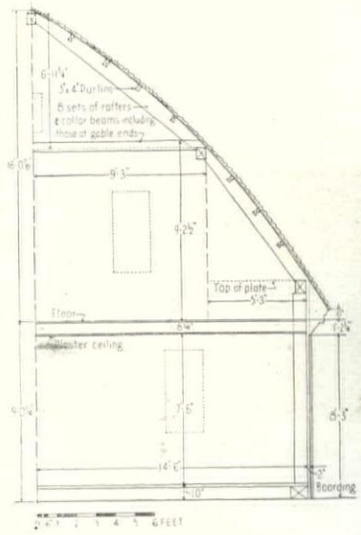
Thus, the democracy forced on Cape inhabitants by communal society and general absence of wealth was matched by a lack of democracy toward anything outside this society. The result: an even tighter knitting together of the culture within its shores. The uniformity of the Cape house stems from two seemingly irreconcilable forces: bigotry and equality, which actually conspired to reinforce each other. The look of the house itself reflects this state of mind. Simple, unpretentious and graceful in proportion, it is also closed in upon itself, with small windows toward the outer world, all focus directed toward the tight interior core.

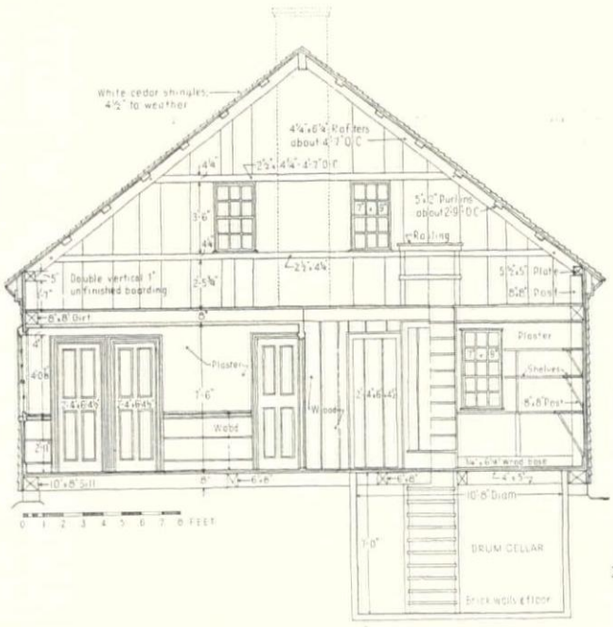
WHEN the Pilgrims put into Provincetown Harbor in 1620, they found Cape Cod "comaspsed about, to the very sea with oaks, pines, juniper, sassafras and other sweet woods . . . the crust of the earth a spits depth, excellent black earth."

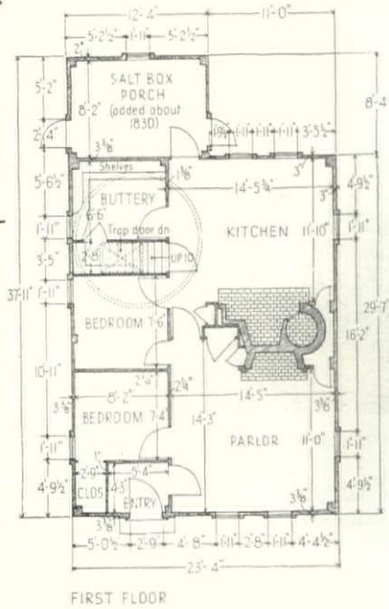
Photo by Haskell



BOWED ROOF was originally a shipwright's fancy, made by bending green timbers over a rock. Later and less skillful builders produced the same form by carving two timbers to produce a continuous curve (see section, right).







EARLY SECTION AND PLAN show typical construction features of the authentic Cape Cod: thin walls, shallow windows, low ceilings, no foundation, round brick root cellar and huge cooking fireplace with oven. Because it is a half house, the chimney block is placed off center to allow better room division. Stairs are thus in an atypical position, not braced against the chimney.

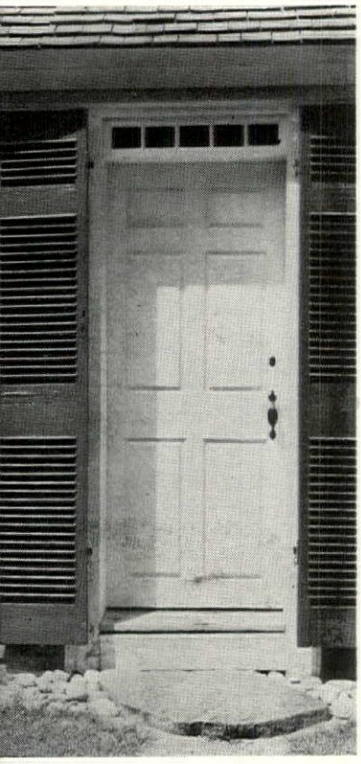
Historic American Building Survey U. S. Department of the Interior

John Gregory



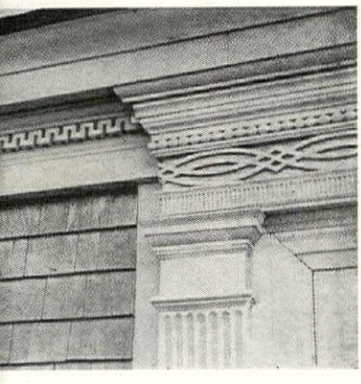
TYPICAL EARLY WINDOW has 15-light sash with nine panes in top frame, six in bottom. "Bottle glass" was used until improved blowing made larger panes feasible. Muntins were flat strips painted black, green or white, according to taste.

Samuel Chamberlain



DOOR OF OLD HOUSES was Huguenot Cross framed by straight timbers and plain, ribbon lights.

Alfred Easton Poor



GREEK REVIVAL FAD inspired builders to paste fanciful columns and heavy cornices on the modest shingled box.

The first settlers, a decade later, were farmers, attracted from less fertile regions on the mainland. In their enthusiasm for Cape soil, they hacked away at the forest with such abandon that they eventually destroyed their livelihood. Dense vegetation had protected the thin top layer of Cape Cod from wind erosion. Now, in short order, the "excellent black earth" was blown away, revealing barren sand beneath. This is one of the major factors which sent Cape Codders to sea. The great oaks which furnished the frame of early Cape houses became so scarce that oak timber had to be imported from Maine. By the second quarter of the nineteenth century these were being shipped pre-cut, one of the earliest forms of dimension lumber. The famous Cape practice of looting wrecked ships also supplemented diminishing forests. Many old houses rest on oaken timbers taken from the hulls of vessels which came ashore in a storm.

THE two most typical structural features of the Cape Cod Cottage are thin walls and shallow windows, the latter set out beyond the exterior wall line. Construction was simple post and lintel, and vertical oak planking was applied only to the exterior of this frame. Window frames were then pegged directly to the planking, projecting out to give a good reveal. In early houses, the interior was finished in pine paneling applied directly to the inside of the exterior sheathing or, in some cases, furred out an inch or so. Later houses used lath and plaster, also applied directly to the exterior planks. Furred construction allowed the use of a local type of insulation: seaweed between two layers of paper.

As long as the original oak was plentiful on the Cape, its timbers were used for the massive sills which were the only ground supports for this foundationless house. Brick or stone was substituted when oak became scarce. But never were there underpinnings; floors were merely 2 ft. wide oak planks placed on runners close to the ground. A mortar made of burnt clam and oyster shells filled the chinks in sill joints and also in the wall frame. During the winter, seaweed was banked around the sill beams to further insulate the drafty house. In Provincetown, old sails nailed to the floors and painted were used to keep out the ground breeze.

Typical roof construction consisted of four roof trusses and a central beam supported by the chimney. The trusses were connected by thin purlins and then laid over with heavy, broad boards, rabbeted together in a vertical fashion from roof pole to eave, rather than in the now common horizontal manner. This rabbeting was used on ships to save oakum in calking and on the house it was thought to be a superior rain shedder and allow for settling. The hand of the ship's carpenter can be seen most plainly, however, in the bowed roof. Timbers for these "ship bottoms" were cut green and laid over an 18 in. rock to dry, with ends weighted down to give the proper curve.

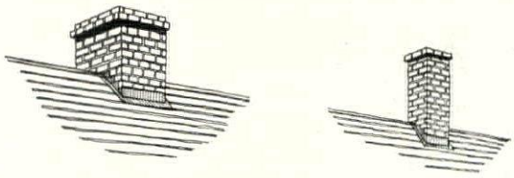
The finish of the roof, bowed or straight, was pine shakes. These extremely large shingles, 18 in. in length, were laid over the roof boards and deeply lapped with only 1 or 2 in. of weathering. Thus, at any point the roof was protected by four or five layers of shingle—almost the equivalent of heavy thatching and much more permanent.

Exterior wall finish was of these same pine shakes and later, cedar ones. Clapboards came in at the beginning of the seventeenth cenry and were first used only on the front of the house. One deterrent was that they required painting to prevent rot while shingles did not. First only the front, then two sides were clapboards and if wealthy, three, but clapboarding a whole house was considered "showy."

One of the hallmarks of the earliest houses is high window placement, frames set to join the roof beam under the eaves. Subsequent builders moved the windows down and added a cornice. But small eaves with the rake tight against the wall are typical of the oldest cottages.

Early doors were framed with straight undecorated timbers in contrast to the later fluted columns. Greek revival influence hit particular spots in the house: cornices, doorposts and interior cornices and trim. These detail changes arrived at the beginning of the "stove age," when the whole interior of the cottage was beginning to shift.

Originally the huge, 50 sq. ft. chimney was the center of the house giving it solidity and a focal point of organization. In the 1840's the stove was introduced and most families tore out their gracious fireplaces substituting the more effective if less romantic stove. At this period the house began to have real troubles. The use of stoves brought with it smaller flues and chimney stacks, taking away from the graceful exterior proportions of the original houses. Stoves were also placed at the outside of



the rooms rather than the center. In a desperate effort to keep the chimneys in center, flues were run horizontally through the attic and then down the outside walls. Stairs were moved from their front location braced against the chimney and closets were substituted in the space formerly dedicated to fireplace. Without adding to the looks of the house, interior organization was disrupted.

Since even the small changes wrought in the original Cape Cod by the stove began to spoil its structural unity, it is small wonder that twentieth century "adaptations" are not sucessful. Modern methods of heating, sanitation and storage—not to mention modern ways of living— are in hopeless conflict with the tight organization of the original design. The old house was the best and most appropriate architecture its day could produce. It had many faults—too little light and ventilation; bad drafts in winter and stifling heat in summer; no consideration of closets or bathrooms. The modern Cape Cod, bound by an outmoded plan, cannot entirely escape these drawbacks. In addition it has lost the beauty and simplicity which were the outgrowth of functional design in the original cottage.

(Part II: *The Modern Cape Cod Cottage*, will appear in the March issue)

HOUSES

A Detroit architect builds one house where two stood before

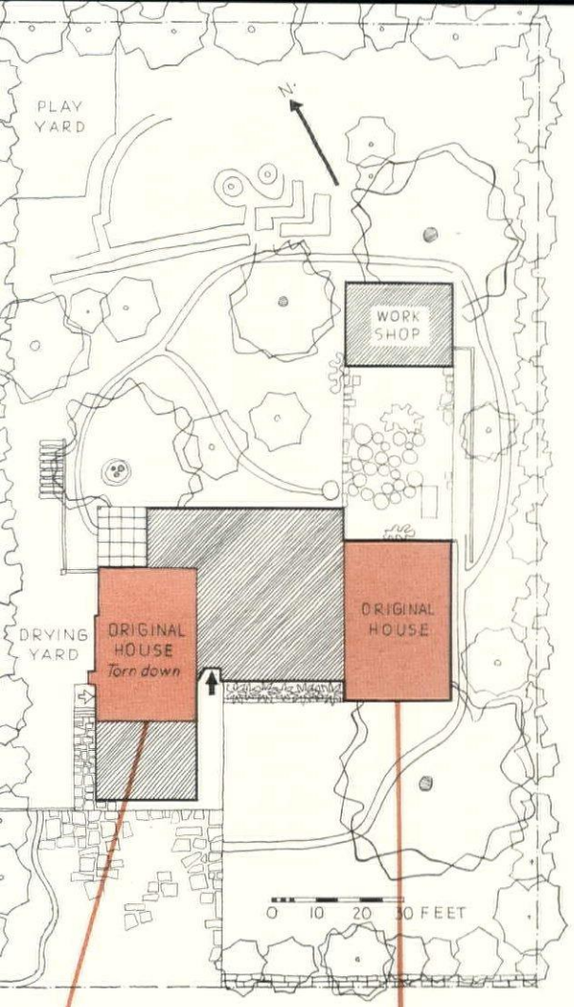
LOCATION: Grosse Pointe, Mich.

ALEXANDER H. GIRARD, Architect and Owner

Last year, while scouting for a building site, architect Alexander Girard and his wife came upon a pair of run down houses overlooking Detroit's only pine grove on the hinterland side of Grosse Pointe's fashionable Lake Shore Drive. Visualizing a single modern structure in place of the two existing dwellings, Girard bought the property. He razed one house, converted the other, and joined it to a new building which utilized the foundation of the demolished house and the 20 ft. of space that had separated the two original structures. The resulting hybrid is a surprisingly successful home in which the owner (Girard himself) can live, work, receive clients, and entertain.

Core of the house is a spacious living room (20 ft. x 30 ft.) which includes a screened off area where Girard does much of his work. By acting as his own contractor, he saved on fees, cut construction costs to $9 a sq. ft.

Although Grosse Pointers still look warily at this newcomer (the first modern building in a radius of several miles) the Girard house has achieved local recognition from a most conservative source. Surrounding stretches of land never considered saleable, have since been cut up for market, labeled—"ideal for ranch houses."



Paul Gach

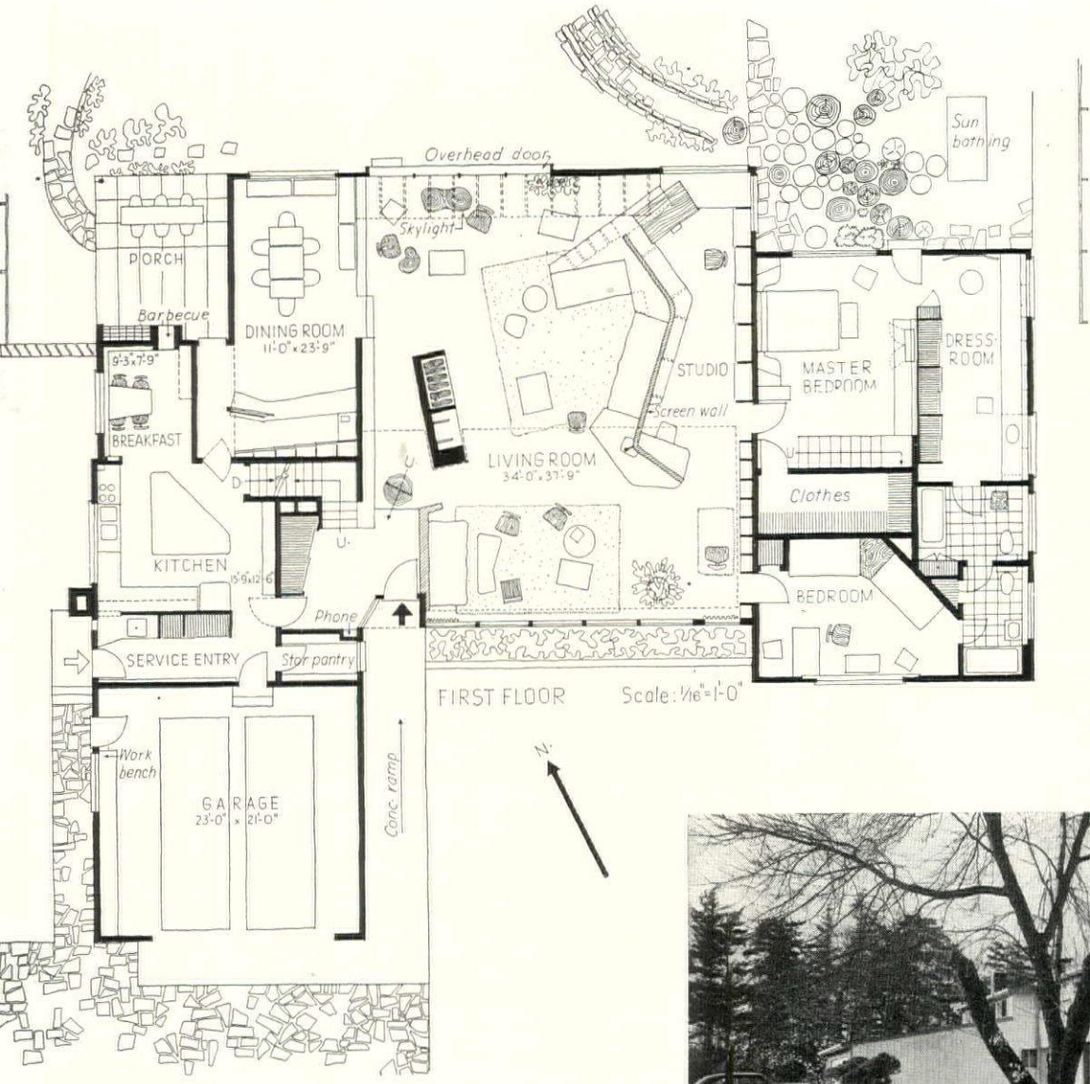


GIRARD KNIT TWO AND PURLED ONE TO CREATE THIS MODERN, TEN ROOM HOUSE

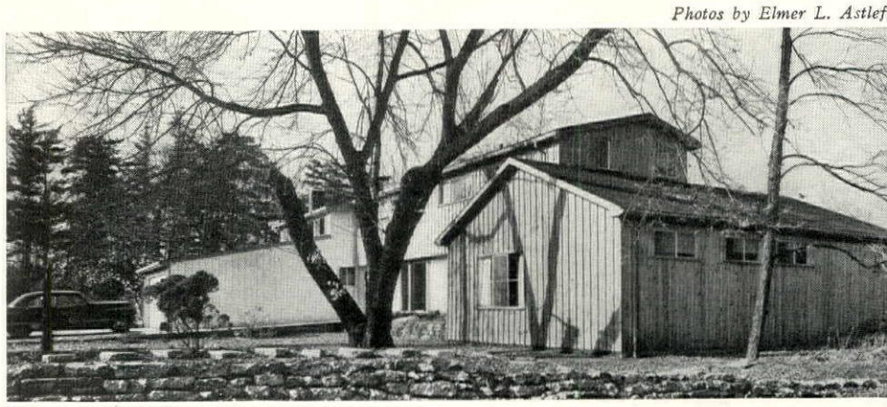


Elmer L. Astleford

Main floor convenie



Photos by Elmer L. Astlef

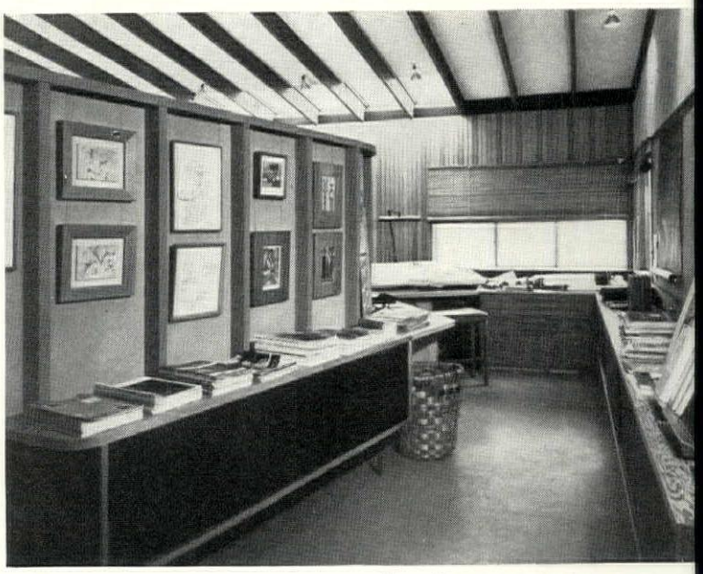


CURVED SCREEN DIVIDES ARCHITECT'S "STUDIO" FROM LIVING AREA, ACTS AS DISPLAY WALL FOR EACH, AND MAKES A BIG ROOM CO

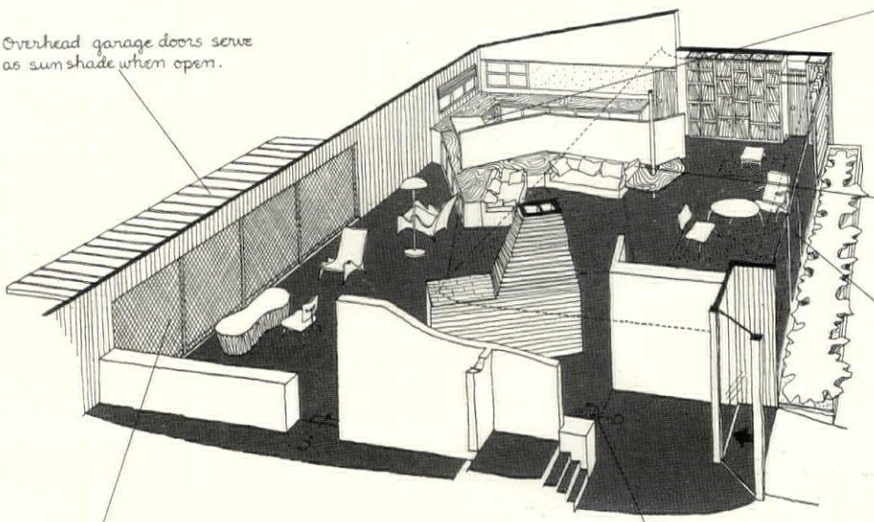


ırates family from clients and leaves room for the guests

Architect Girard's outsized living room is the hub of a house from which other rooms ramble in the pleasantly accidental manner dictated by the location of the original structures. Aside from the deliberately screened off workshop, the room falls into three areas: 1) that near the front of the house, facing south, which receives the winter sun; 2) the north exposure, skylighted to admit north light into the studio space; 3) the central section, which faces a large, free-standing fireplace from a semi-circular arrangement of comfortable couches. In summer the north exposure is opened to a garden by raising outside aluminum doors, which then become an awning, after removing interior wooden panels. Fixed screens give protection against insects.



Studio-workshop is separated from living room by screen-wall, has built-in storage cabinets, drafting table, tack-up boards.



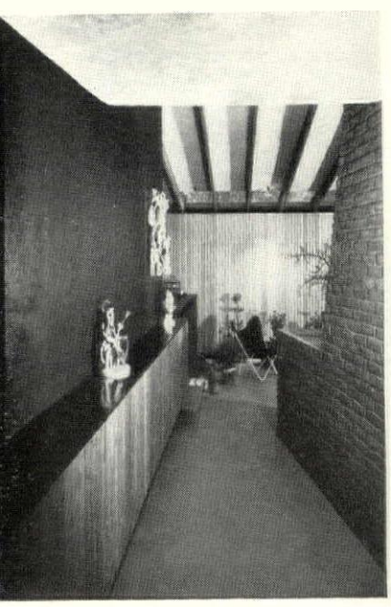
Overhead garage doors serve as sunshade when open.

Built-in group includes lounges, radio-phonograph, record storage, etc., faces fireplace. Is particularly pleasant at night and during stormy weather.

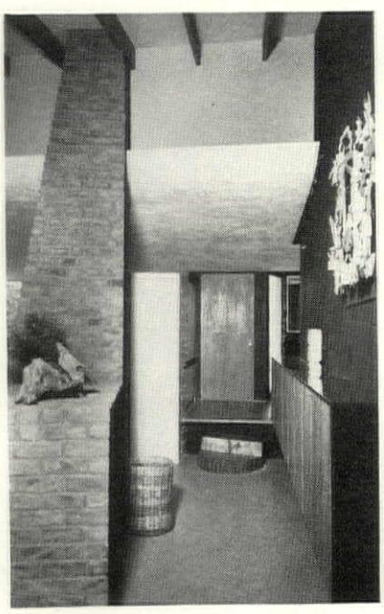
This sitting area receives winter sun, is protected from entrance hall by plywood faced screen wall.



Wood panels fit into screened openings during winter months. This is favorite sitting area in summer.



Living room is three steps below level of entrance hall. Space behind free-standing fireplace permits access to dining room and far end of living room without disturbing fireplace group



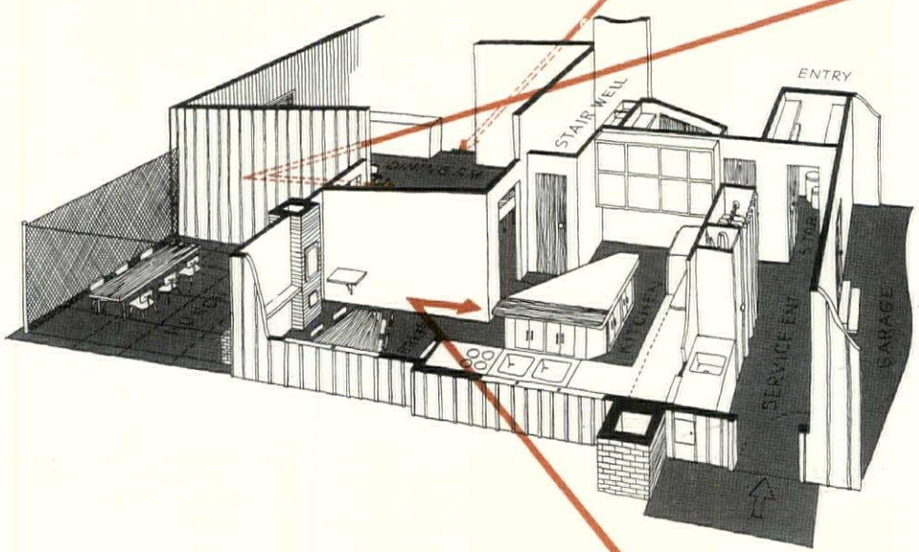
Over spacious living and service a



BOTH CEILING AND FLOOR LEVELS VARY. NOTE RISE TO DINING AREA



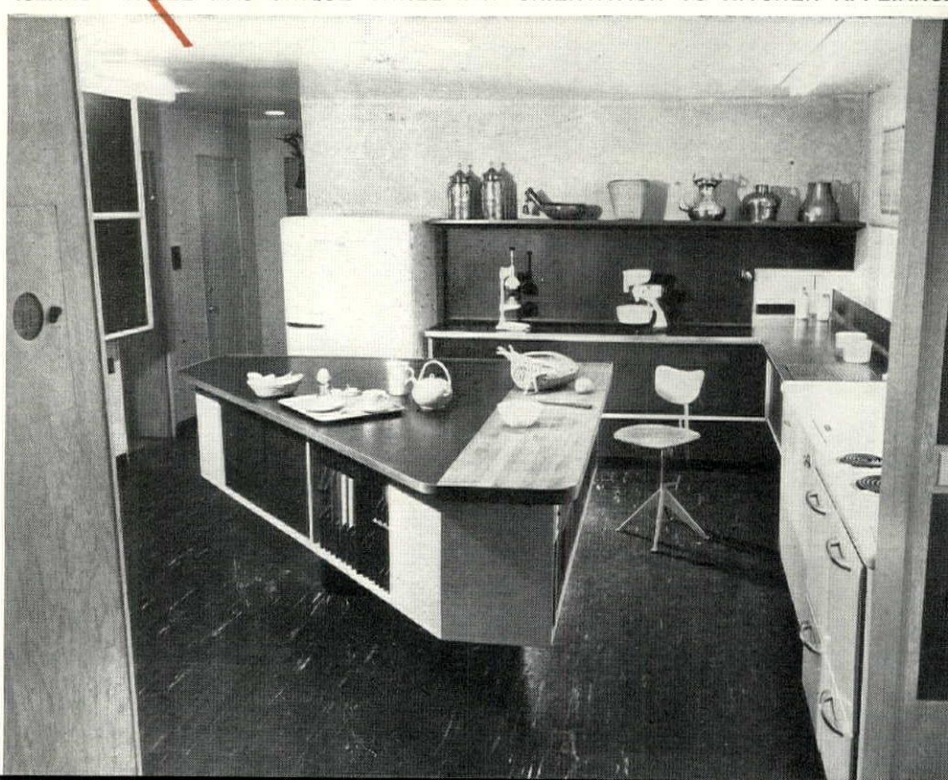
COUNTER, STANDING ON LIGHT PIPE LEGS, CAN
BE USED AS FOOD BAR OR AS SERVING SURFACE



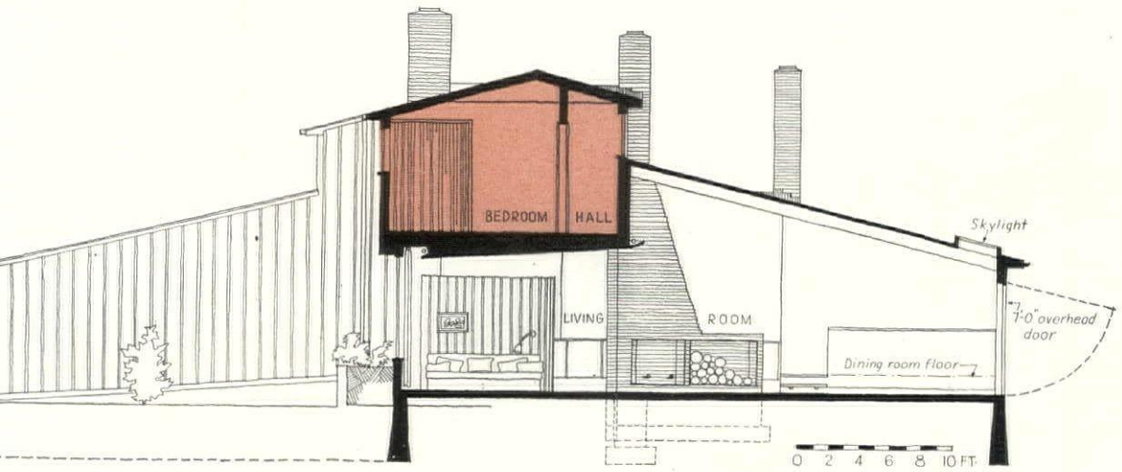
Indirect cove lighting and carefully placed spots in the living room emphasize furniture groupings at night to maintain definitions created by daylight. Girard's built-in furniture forms a basic part of the interior design, and was custom made by local carpenters under the owner's direction. An unusual dining room cabinet zig-zags, from a depth of 4 in. to 1 ft. along one wall. The kitchen table uniquely separates working space from family passage to informal eating area; also provides sizeable storage unit which serves every point in the room with equal convenience.

In planning the service wing, Girard gave special attention to an outdoor dining porch just off the main dining room and directly accessible from the kitchen. A serviceway that opens into both the kitchen and main entry also give this part of the house excellent circulation while keeping it separate from the living quarters.

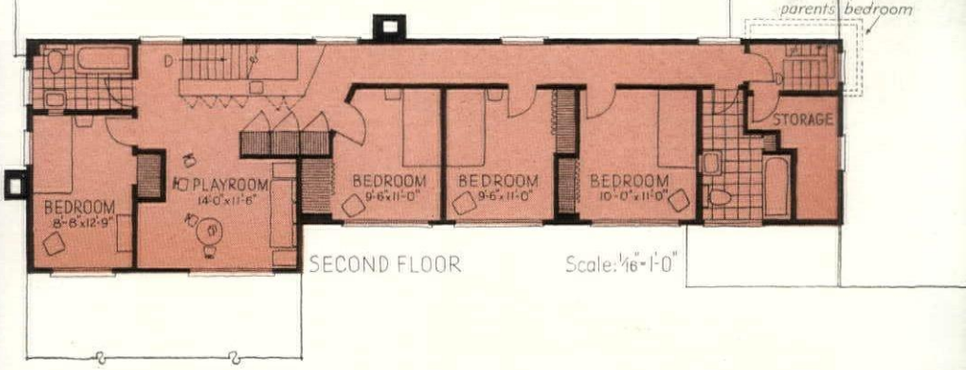
"ISLAND" TABLE HAS UNIQUE THREE-WAY ORIENTATION TO KITCHEN APPLIANCE

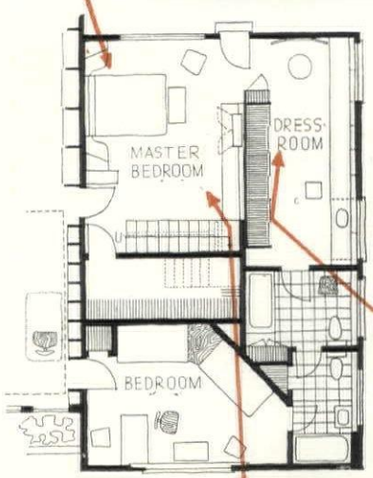


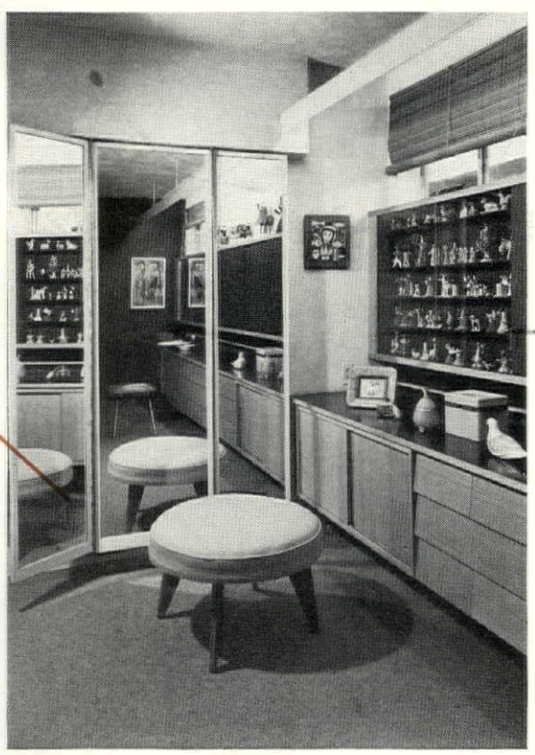
nd floor rooms follow a single "trolley line"



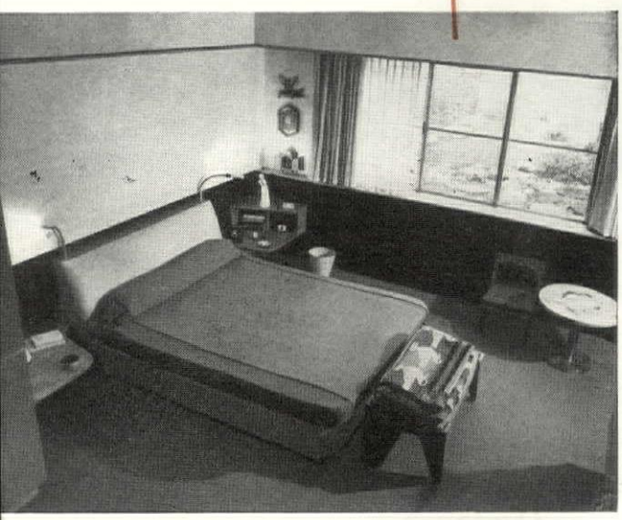






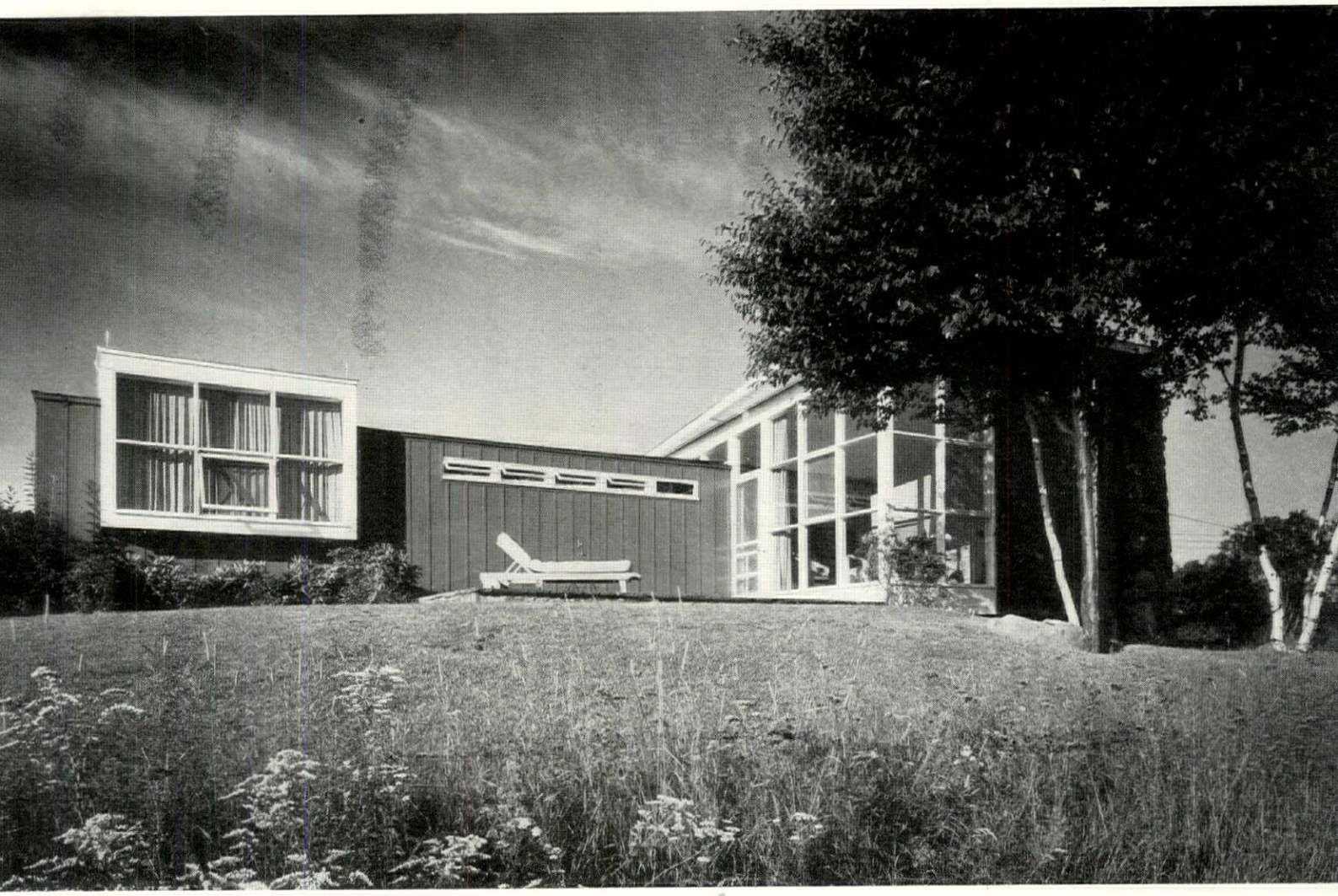


CONSTRUCTION OUTLINE: Exterior walls—studs, Air-O-Cel insulation, Johns-Manville Corp., Vaporseal, Celotex Corp., sheathing, tar paper and vertical pine. Interior partitions — fir plywood or plaster on Rocklath, U. S. Gypsum Co. Ceiling (2nd floor) — Homosote, Homosote Corp. **WINDOWS:** Sash—sliding aluminum, G. D. Peterson Corp. Aluminum jalousies—J. S. Thorn Co. Shades—The Aeroshade Co. **DOORS** (interior) — Paine Lumber Co., Ltd. Aluminum doors —Wilson Foundry & Machine Co. **PLUMBING FIXTURES**—Crane Co., W. A. Case & Son Mfg. Co., Briggs Mfg. Co. and American Radiator - Standard Sanitary Corp. **HEATING:** Boiler —Pacific, U. S. Radiator Corp. Radiators — Vulcan Mfg. Co. Controls — Minneapolis-Honeywell Regulator Co. and Perfex Co.



Cantilevered staircase in the master-bedroom gives parents direct access to children's quarter above. The guest bedroom (which directly adjoins the working area) also serves as conference room.

Photos by Lionel Freedman: Pictorial Servic

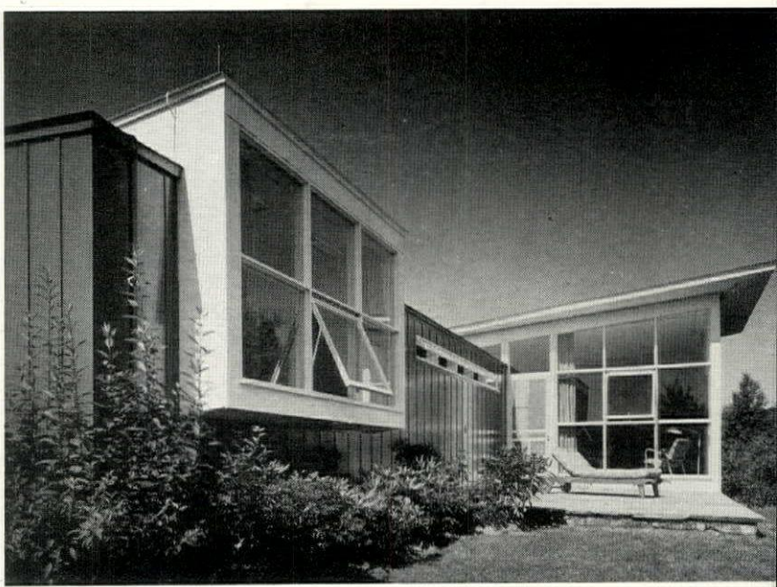


Sixty-one acres and a view set off this owner-designed house

LOCATION: Sharon, Conn.
ROBERT CHAPIN, Designer and Owner
EDWIN J. BALDWIN, Builder

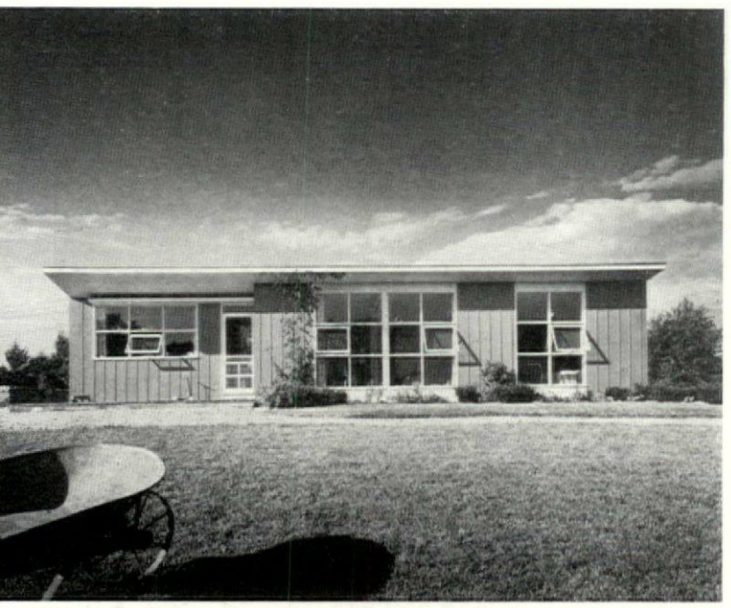
Like Detroit's architect Alexander Girard, New York City's Robert Chapin, cartographer-designer, wanted a house that would serve as a part time studio. He also wanted to live in the country. High on a hilltop he found a site sufficiently bucolic for a commuter and at the same time convenient to the schools and stores of nearby Sharon.

Chapin waded into the project gradually. In 1940 he built a one-room, week-end cottage, now used as a guest house. Two years later the carport-toolshed went up. The war forestalled further activities, but in March, 1946, he excavated for the main house. Carpenters were still scarce, supplies hard to get. Chapin invested in some tools, turned carpenter, and made all his own millwork with the exception of the doors. To get full advantage of the lovely valley view and a clump of birches on the immediate site, the north living room window was mocked up before construction started, and the house, in effect, built around it. The studio windows were similarly oriented to get both the view and a good north light. Bedrooms face south and the kitchen is located on the front entrance terrace, overlooking the main play area and the approach to the house. The Chapins moved in during the summer of 1947.

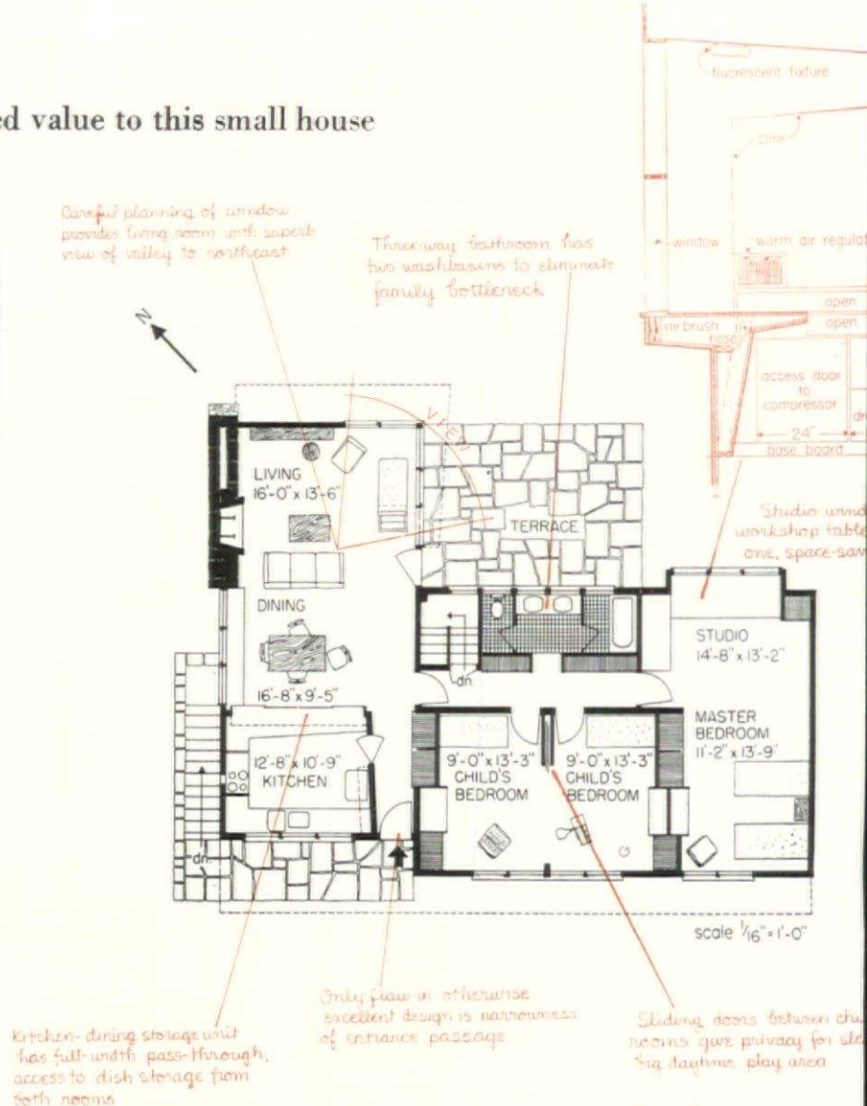


LIVING ROOM FACES NORTHEAST, OVERLOOKING VALLEY IN DISTAN

Bright ideas, plus ingenious planning, give added value to this small house



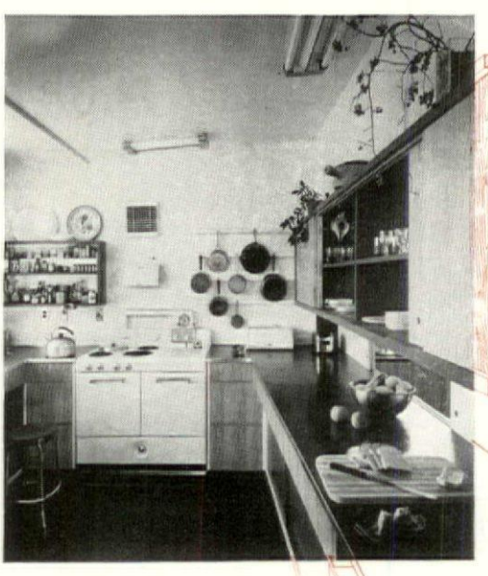
OVERHANG CUTS DOWN SUN INTO KITCHEN AND BEDROOMS



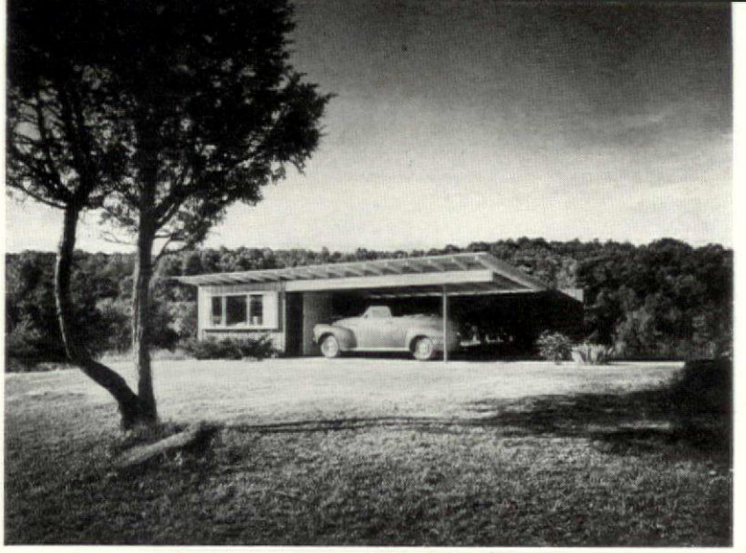
Most architects who design their own homes are as hard to please as their clients. Chapin, no exception, adopted the criteria of a fussy housewife. With six years to plan, he worked slowly, incorporating in his house a number of new features from other contemporary homes. The children's bedrooms, for example, can be opened up into a playroom by means of sliding doors. The bathroom is neatly compartmentalized for multi-use; two washbasins speed the morning ablutions. A large proportion of the partitions have been used for storage units.

This is a modern house with a basement harboring a hot air furnace, laundry, workshop, and storage space. A game room, an extra lavatory, and a deep freeze will be added later.

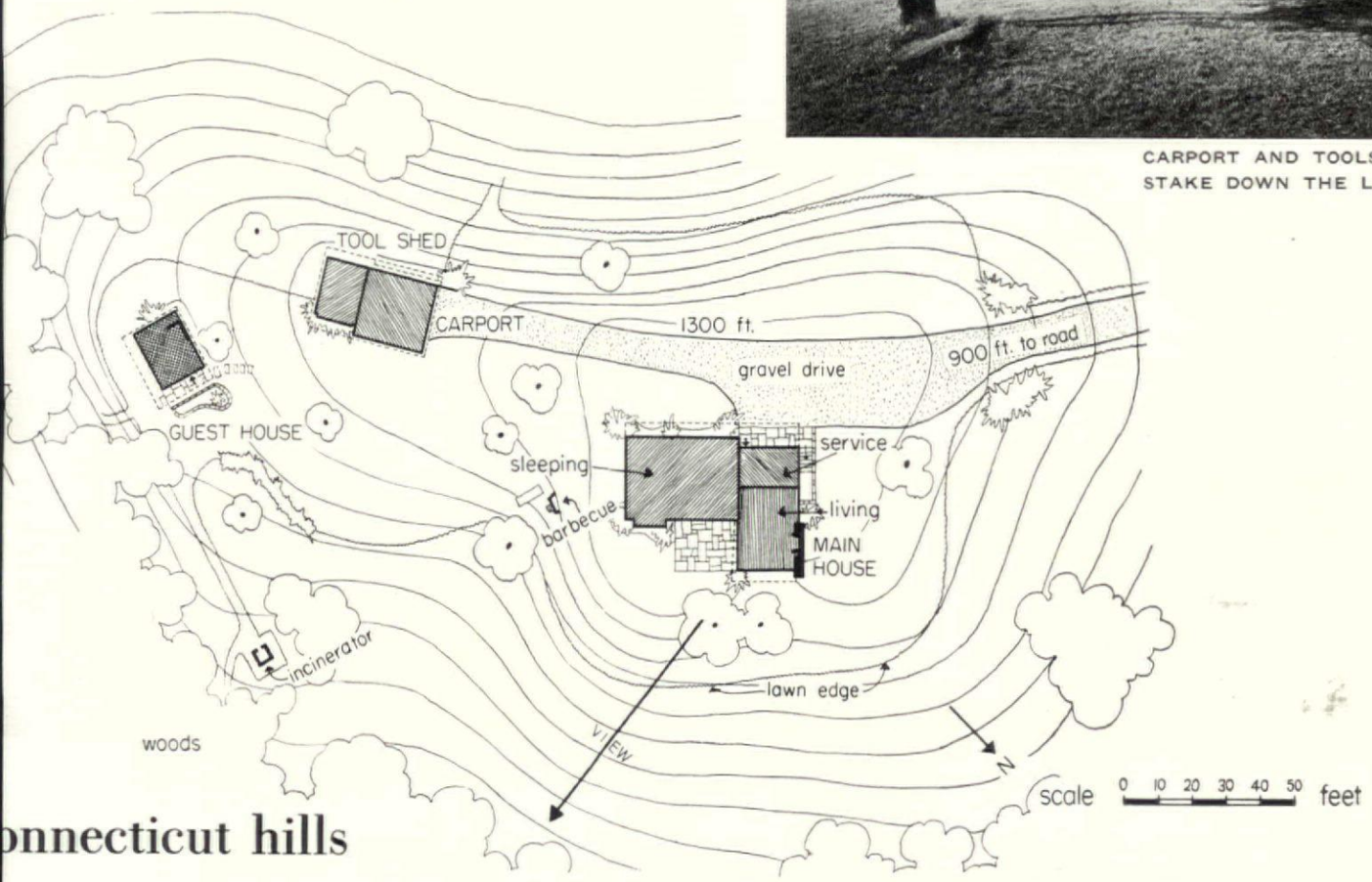
The owner's studio is actually an extension of the master bedroom, giving added dimension to both areas although keeping them separate in function. Even more space is gained by combining the studio work table and window into one cantilevered unit which projects beyond the outside wall.



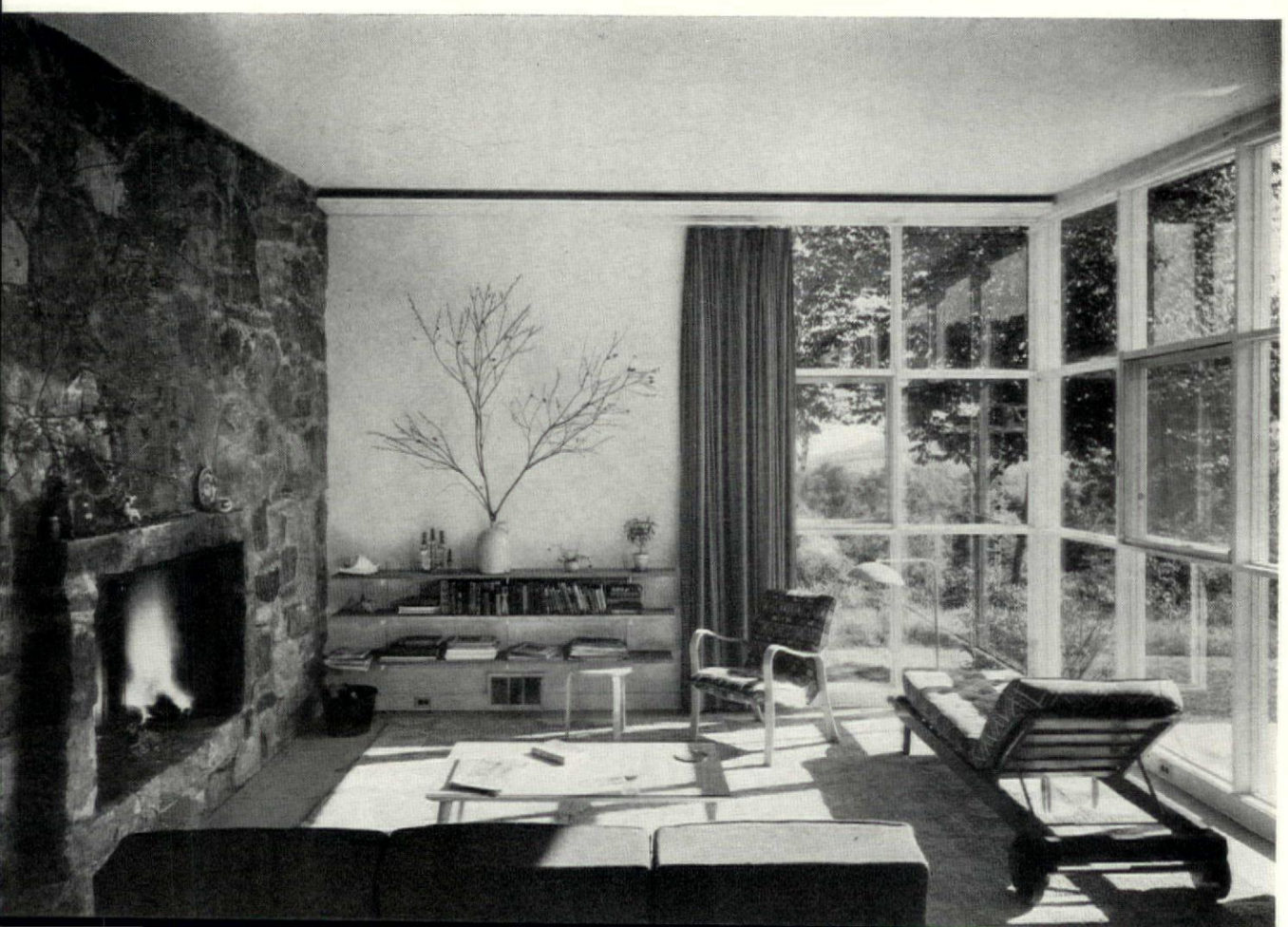
CONSTRUCTION OUTLINE: Foundations — concrete footings and cement block, Portland Cement Co. STRUCTURE: Exterior walls—vertical pine siding with battens, waterproof paper, sheathing, studs, plaster board and plaster. ROOFING—5-ply built-up. SHEET METAL WORK: Flashing—copper. Ducts—Cop-R-Loy, Wheeling Steel Corp. INSULATION—Johns-Manville Corp. WINDOWS: Sash—awning type, wood. Glass — Pittsburgh Plate Glass Co. Screens — Rolscreen Co. FLOOR COVERINGS: Main rooms—plywood, U. S. Plywood Corp., carpet covered. Kitchen, bathrooms, etc.—linoleum, Armstrong Cork Co. FURNISHINGS—Artek Pascoe Co. Beds—Simmons Co. Curtains—Celanese Corp. and Goodall Corp. EXTERIOR DOORS—U. S. Plywood Corp. HARDWARE—Charles Parker Co., P. & F. Corbin, Grant Pulley & Hardware Co., H. S. Getty Co., H. L. Judd Co., Dalmo Victor Co. and Vincent Whitney Co. PAINTS—Benjamin Moore & Co., U. S. Gypsum Co. and National Lead Co. ELECTRICAL INSTALLATION: Wiring—BX. Switches—mercury, General Electric Co. Fixtures—Kurt Versen, Sylvania Electric Products and General Electric Co. PLUMBING FIXTURES—American Radiator-Standard Sanitary Corp. Water closet connections—lead. Water pipes—copper tubing. KITCHEN EQUIPMENT: Dishwasher—General Electric Co. Range and refrigerator—Frigidaire Corp. HEATING—forced hot air system with Petro warm air conditioner, Petroleum Heat & Power Co. Grilles—Stewart Mfg. Co.

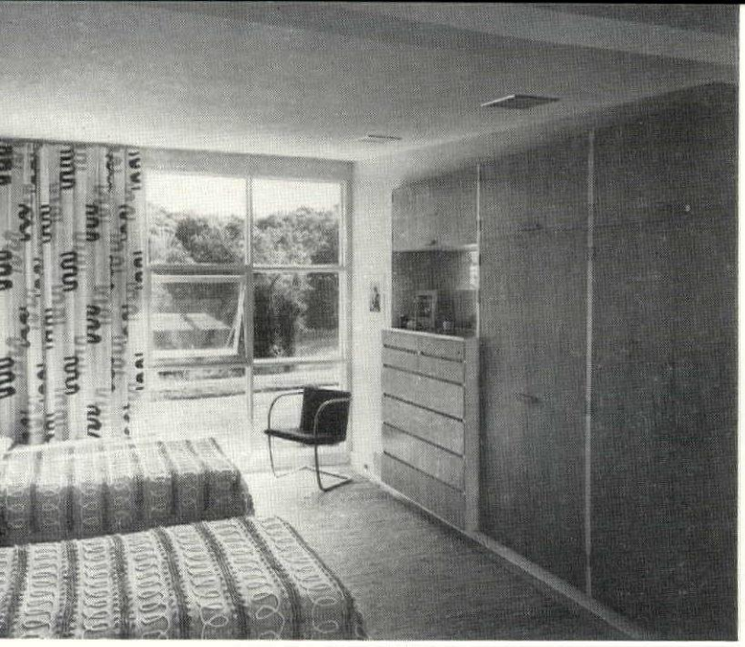


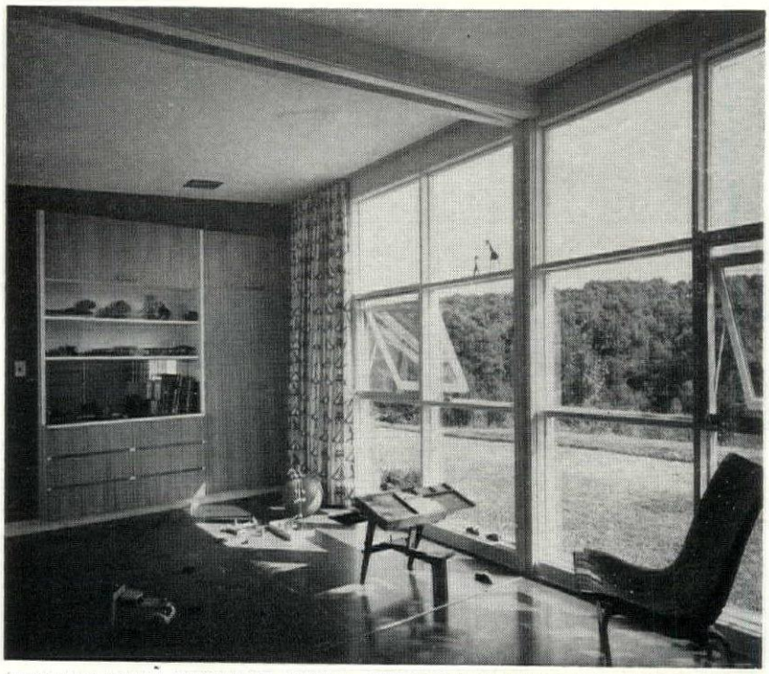
CARPORT AND TOOLSHED HELP
STAKE DOWN THE LARGE PLOT



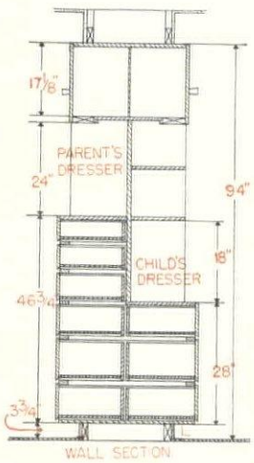
onnecticut hills







CEILING-HIGH STORAGE WALL SEPARATES MASTER'S FROM CHILDREN'S BEDROOM, DRESSERS ARE BUILT TO SIZE OF OCCUPANTS



ASS-THROUGH IS ONE WAY TO BRING KITCHEN WITHIN REACH OF ALL; CABINETS AND SHELVES ARE INTEGRAL PARTS OF THE ROOMS

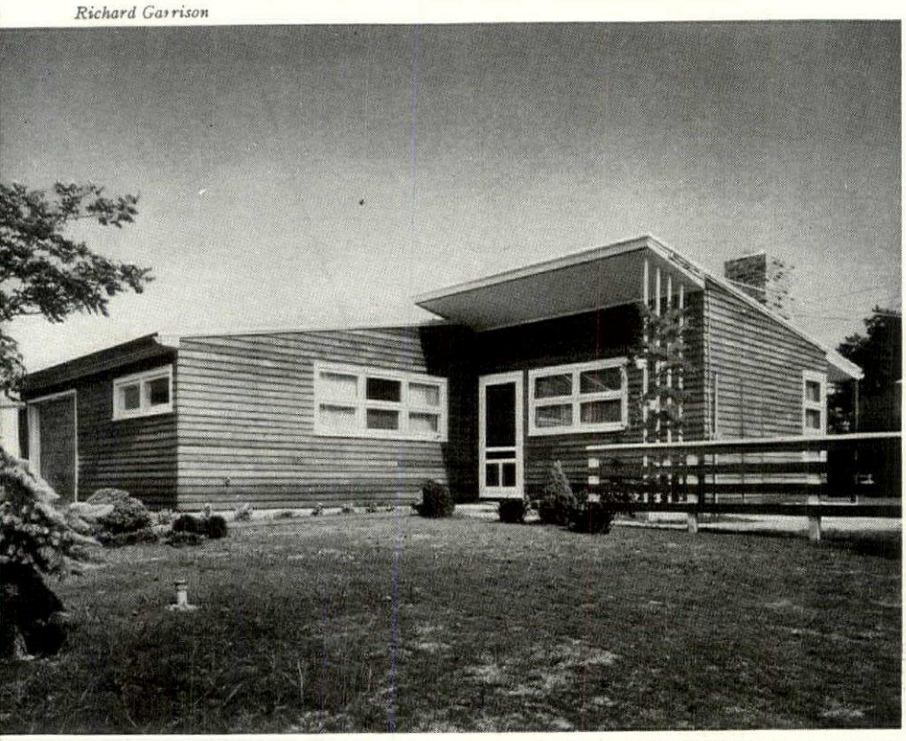


New Jersey architect pares costs by designing a compact house that trades frills for big rooms

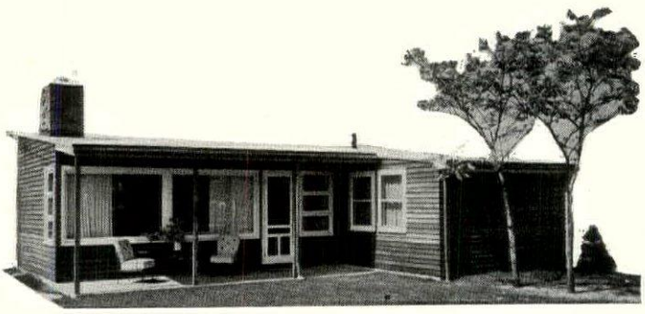
LOCATION: Springfield, N. J.
KENNETH KASSLER ASSOCIATES, Architects
SUBURBAN PROPERTIES, INC., Builder

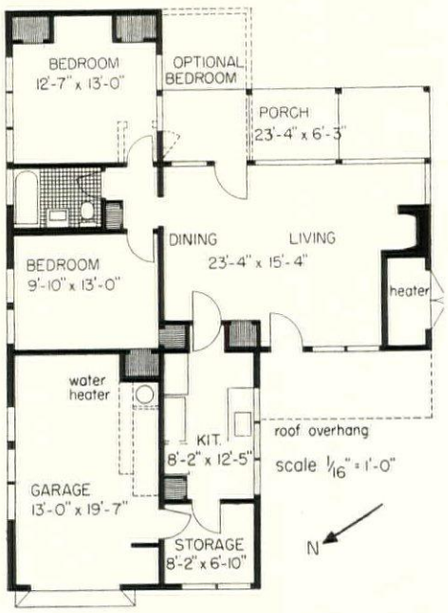
This $15,500 house in Springfield, N. J. is one of eight planed by architect-builder teams working with FORUM and Revere Copper & Brass in an effort to bring quality to one-family homes in the medium price category. Placed on a 70 x 130 ft. lot, which is included in the cost figure above, the house totals 952 sq. ft., exclusive of garage. By avoiding halls, stairs, and other non-livable spaces it was possible to design rooms considerably larger than is usual in the average small home, although very probably this will have some effect on ease of circulation, and may interfere with best deployment of furniture. Glass area is 260 sq. ft. and sloping ceilings add to apparent dimensions of the rooms.

Richard Garrison

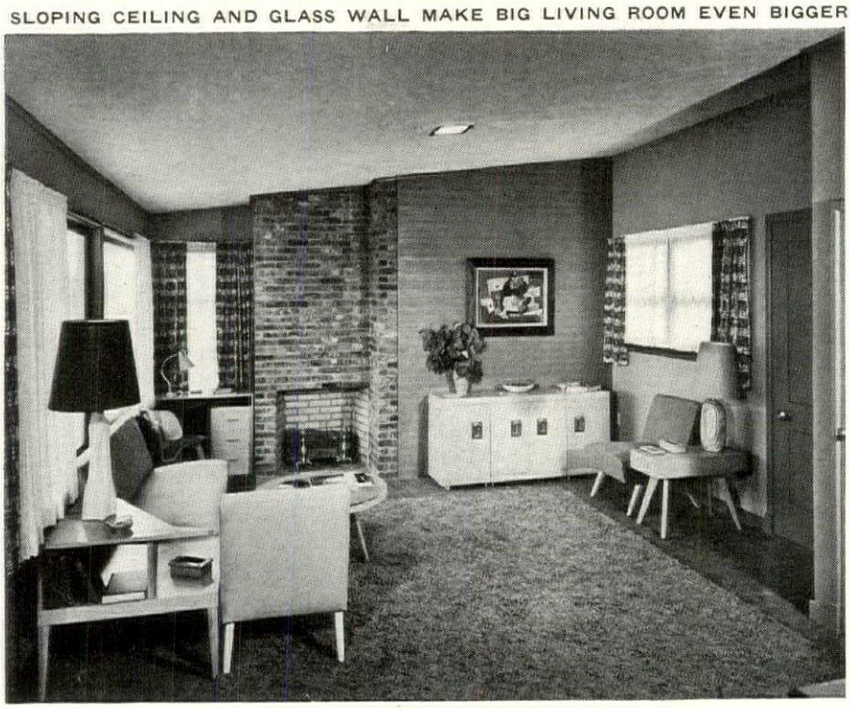


OVERHANG SHIELDS ENTRANCE, GARAGE PROTECTS HOUSE FROM NORTH WIND





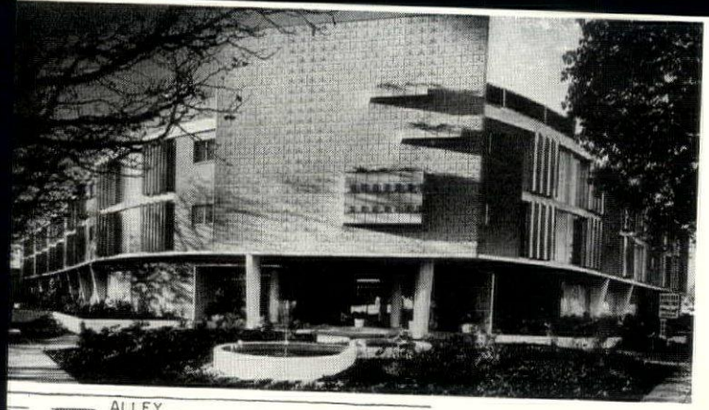
SLOPING CEILING AND GLASS WALL MAKE BIG LIVING ROOM EVEN BIGGER

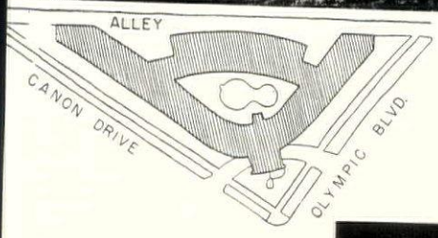


CONSTRUCTION OUTLINE: Structure: Exterior walls—beveled redwood siding. Floor construction—4 in. concrete on 6 in gravel fill. Ceiling finish—gypsum lath and plaster. ROOFING—Flintkote Co. INSULATION: Outside walls and roof—rockwool. SHEET METAL WORK—copper, Revere Copper & Brass Inc. WINDOWS: Sash—Silentite, Curtis Co.'s, Inc. FINISH FLOORING—asphalt tile, Armstrong Cork Co. WALL COVERINGS: Bathrooms—wall tile, Robertson Mfg. Co. GARAGE DOORS—Crawford Door Co. HARDWARE—Schlage Lock Co. and Vincent-Whitney Co. KITCHEN EQUIPMENT—complete unit including washing machine—General Electric Co. BATHROOM EQUIPMENT—Crane Co. Cabinets—Haegger, Inc. HEATING—hot water radiant heating system. Boiler and burner—Westcott Alexander Co. Valves—Thrush & Co. Regulator—Minneapolis-Honeywell Regulator Co.

STUDIO FURNITURE GIVES BEDROOM DUAL EGO







APARTMENT HOTEL

BEVERLY-CARLTON HOTEL, Beverly Hills, Calif.
ALVIN LUSTIG, Industrial Designer
SAM REISBORD, Architect
ECKBO, ROYSTON & WILLIAMS, Landscape Architects
ZIMMER CONSTRUCTION CO., General Contractors

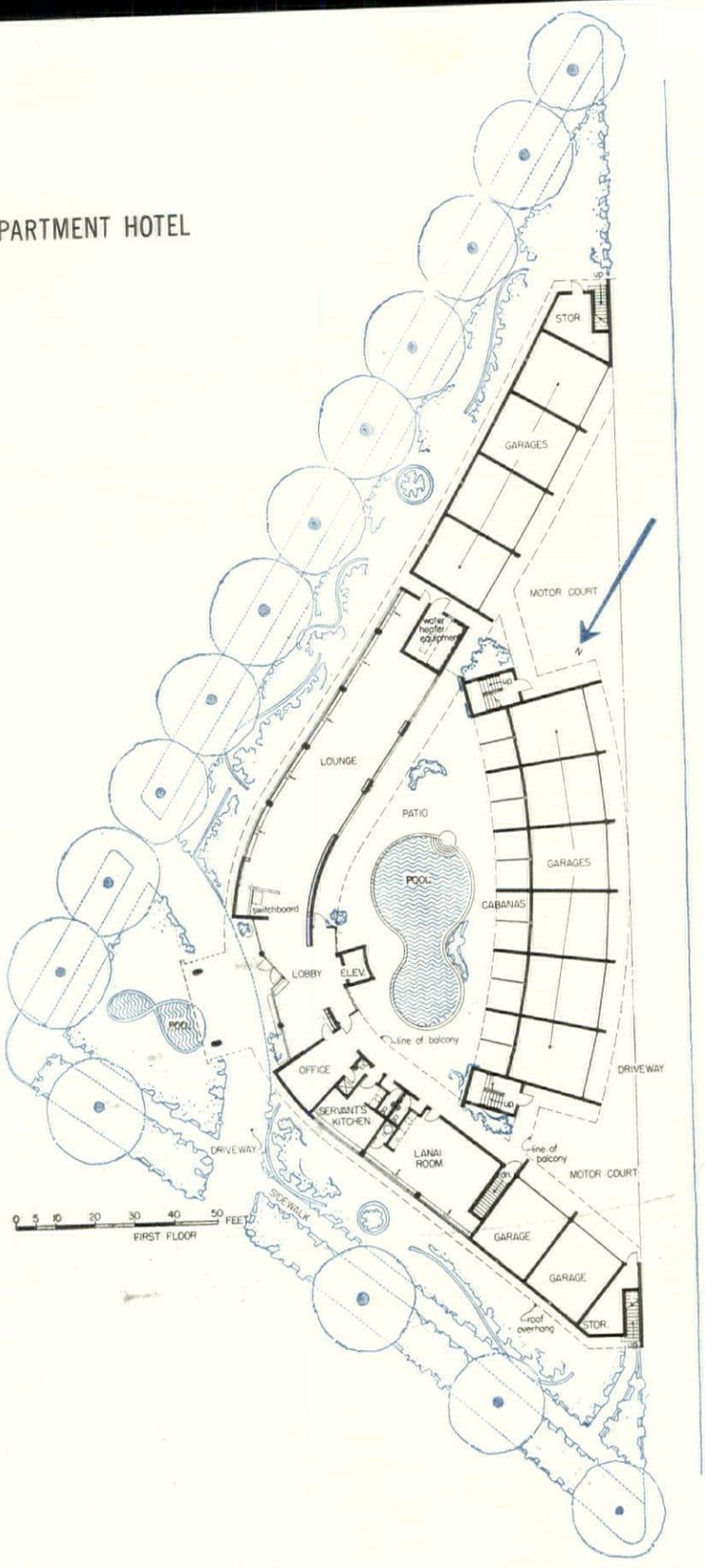
A colorful, highly styled hostelry, cut to the pattern of West Coast living

Photos by Julius Shulman



APARTMENT HOTEL

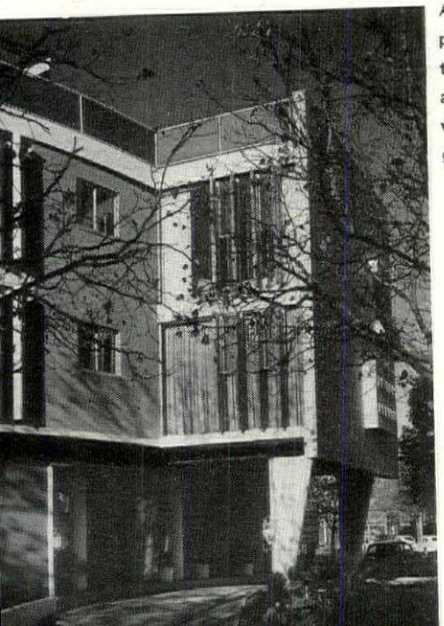
Lean, disciplined lines, emphasized by



Those familiar with Alvin Lustig's outstanding graphic design and interiors have been anticipating with great interest the products of his new collaboration in building with architect Sam Reisbord. This apartment hotel in California, the first major building the two have produced, will come as no surprise in design. Lustig's tension, fine drawn technique, and taste are apparent in all facades of the building, particularly in the rear elevation (facing page) where he has been most successful in translating these talents into architecture.

The new firm started with a tough job. The owners' first inclination had been nothing like this. Bids had already been taken and a financing commitment been obtained on a center hall, Colonial building with a basement garage. But estimates came in too high, and Reisbord & Lustig were called in to submit an economical modern design.

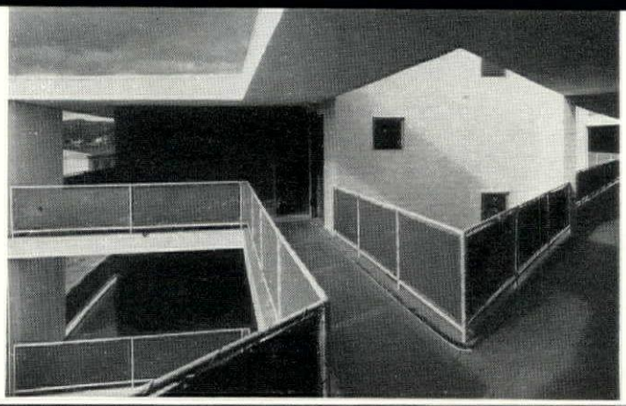
The new design retained the wording of the commitment—a brick masonry structure of 48 rentable units, half with kitchens, half without (making possible combination two-room units), but worked a great economy by moving the costly basement garage up to grade. Outside balcony circulation replaced the halls of the first scheme, allowing greater natural ventilation and illumination of the bed and bathrooms. No rooms are on the alley, and no rooms face each other. A lobby and lounge are included in the economical new scheme which were lacking in the old. The patio and pool are in an enclosed court where formerly they were open to the street, although this last seems a debatable advantage; the enclosed patio is now a victim of the plot, with a somewhat confined atmosphere.

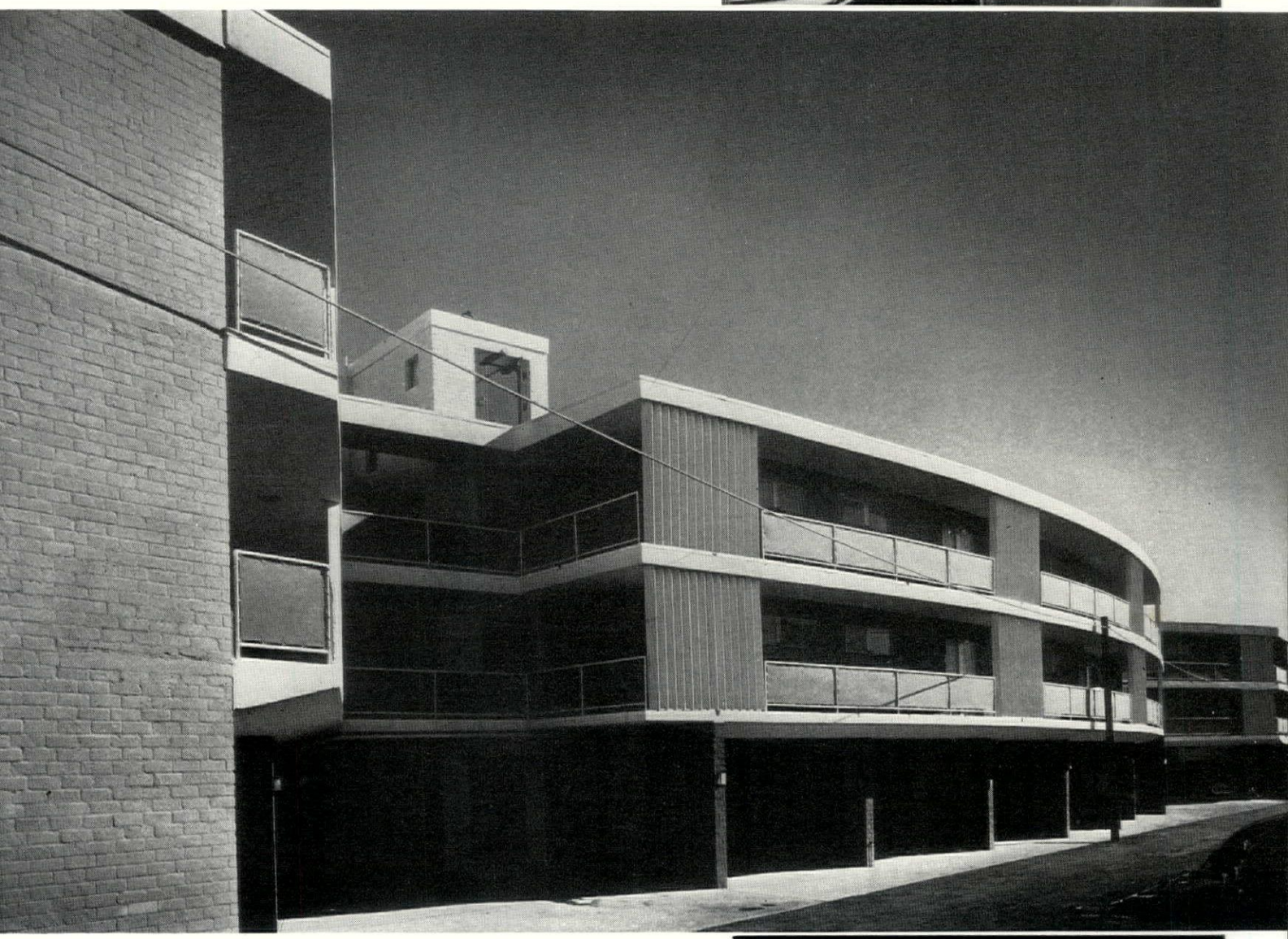


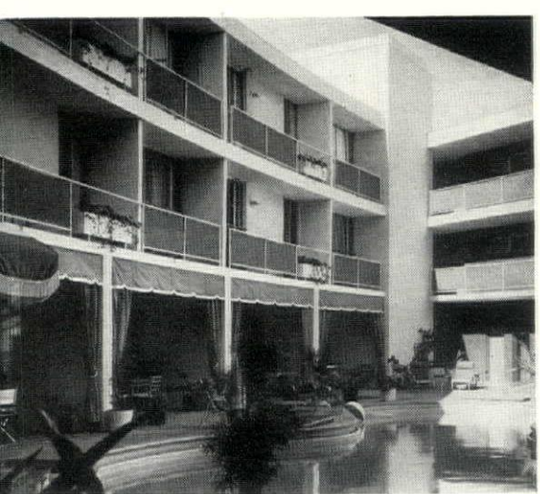
Angled main entrance is behind a porte-cochere, below a panel of patterned cement tile veneer. No apartments are on ground floor, which houses lounge, lanai room, garages, cabanas, and all services.



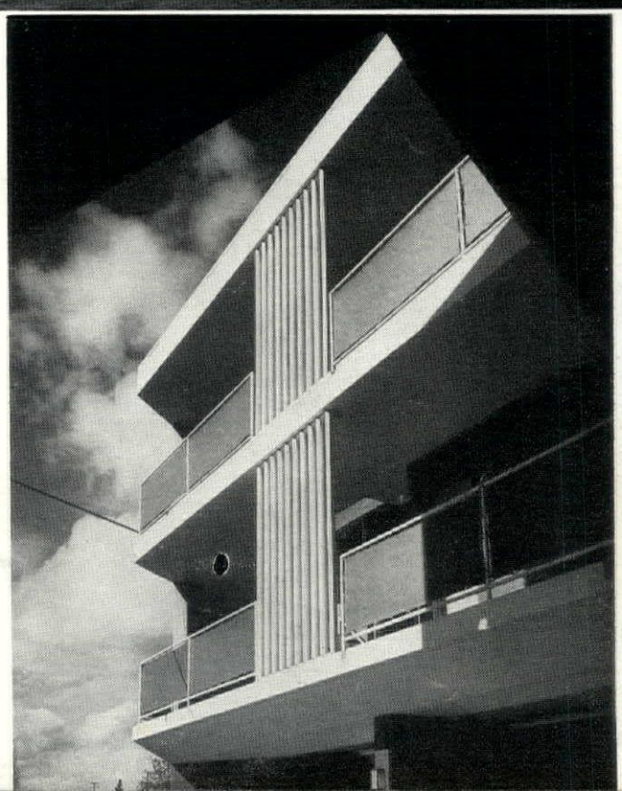
used to dramatize the hotel design and attract traffic trade

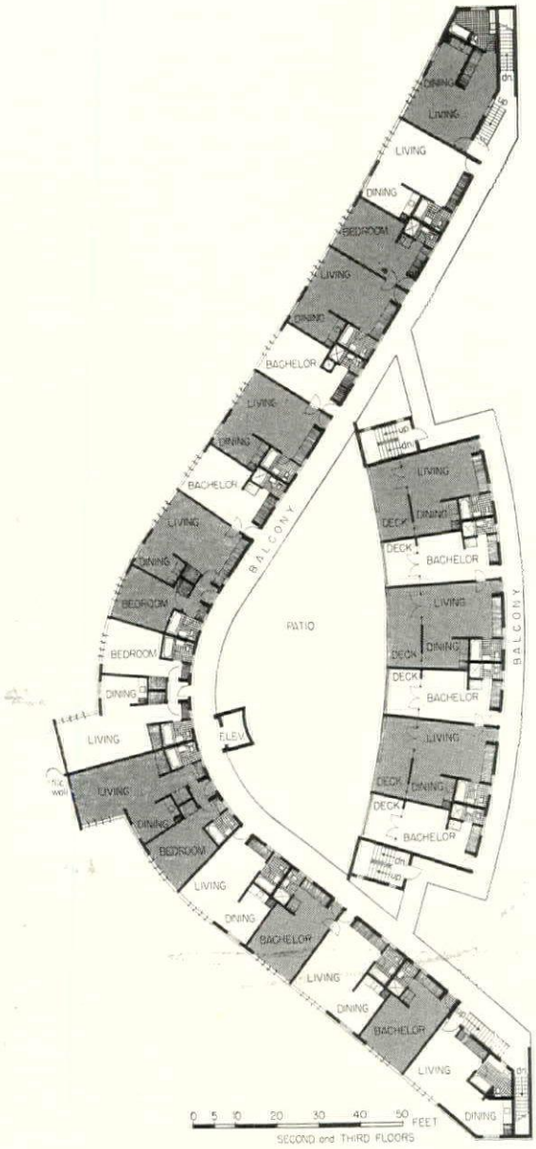






Garages all face on back elevation which is curved to make room for motor courts at either end. Rear of garages are utilized neatly, behind a wall, as cabanas, shown in picture to left. There are no hallways upstairs — instead, open balcony circulation was planned. Rails have colorful canvas panels.



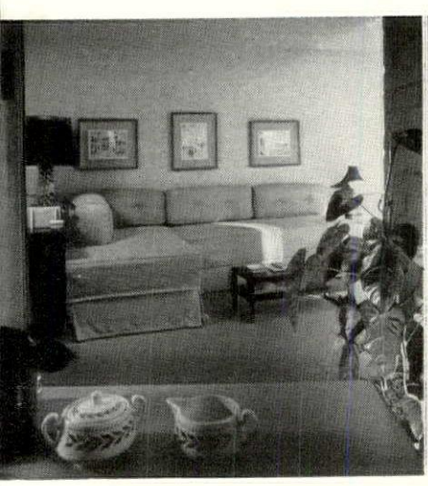


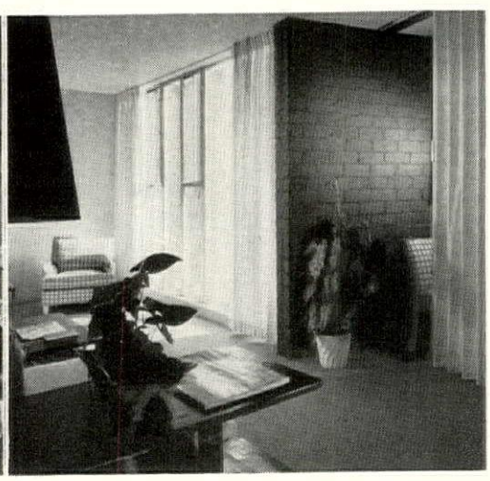
Interior patio, with a doubly curved swimming

The building is rich in color. Floor and eave projections and columns are white accents against the chocolate brown of the painted oversize brick of the first floor and warm gray of the upper stories. Balconies have white pipe rails, with turquoise canvas panels and white cord lacing. A clear chrome yellow has been used on the patio wall of the alley unit. The cement tile veneer of the porte-cochere at the face of the building (photo, page 106) was made to the architects' design, a repeat pattern in blue, yellow, and black on a white face.

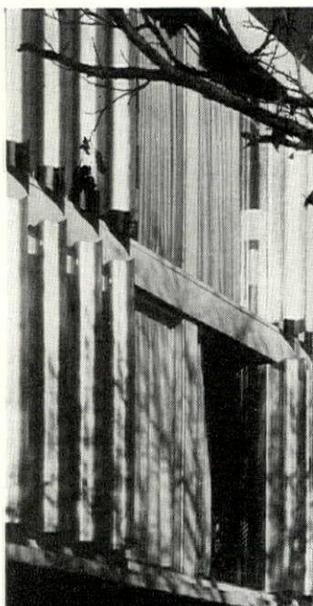
Construction cost of the building was about $425,000, with a combined construction and permanent loan of $250,000 at 4½ per cent interest to be amortized at the monthly rate of $7.60 per thousand in approximately 20 years. Owners estimate that the current value of the lot, bought in 1946 for $60,000, has risen to almost $175,000 in the current California land market.

CONSTRUCTION OUTLINE: Structure: Reinforced concrete. Exterior walls—brick, Higgins Brick Co. Interior partitions—wood stud, gypsum lath, U. S. Gypsum Co. and plaster. Floors—reinforced concrete slab. ROOFING—built-up Pioneer, Flintkote Co. Deck—Surkrete, American Asbestos Products. SHEET METAL WORK: Flashing, etc.—aluminum sheet, Permanente Metals Corp. WINDOWS: Sash—aluminum, Far-Co Mfg. Co. Glass—Libbey-Owens-Ford Glass Co. Screens—aluminum, Rudigar-Lange Co. ELEVATOR—Beckwith Elevator, Ltd. FLOOR COVERINGS: Main rooms—carpet, A. & M. Karagheusian, Inc. Bathrooms—rubber tile, Armstrong Cork Co. Balconies—asphalt tile, David E. Kennedy, Inc. Showers—ceramic tile, Gladding McBean Co. ELECTRICAL INSTALLATION: Wiring—3-wire all metal conduit, Anaconda, American Brass Co. Pipes — Youngstown Steel Co. PLUMBING FIXTURES—American Radiator-Standard Sanitary Corp. Tub and shower enclosures—American Shower Door Co. HEATING—individual Thermidor heaters, Thermidor Electric Mfg. Co. SPECIAL EQUIPMENT: Packaged kitchen units—Dwyer Products Corp. Modernfold doors—New Castle Products Co.

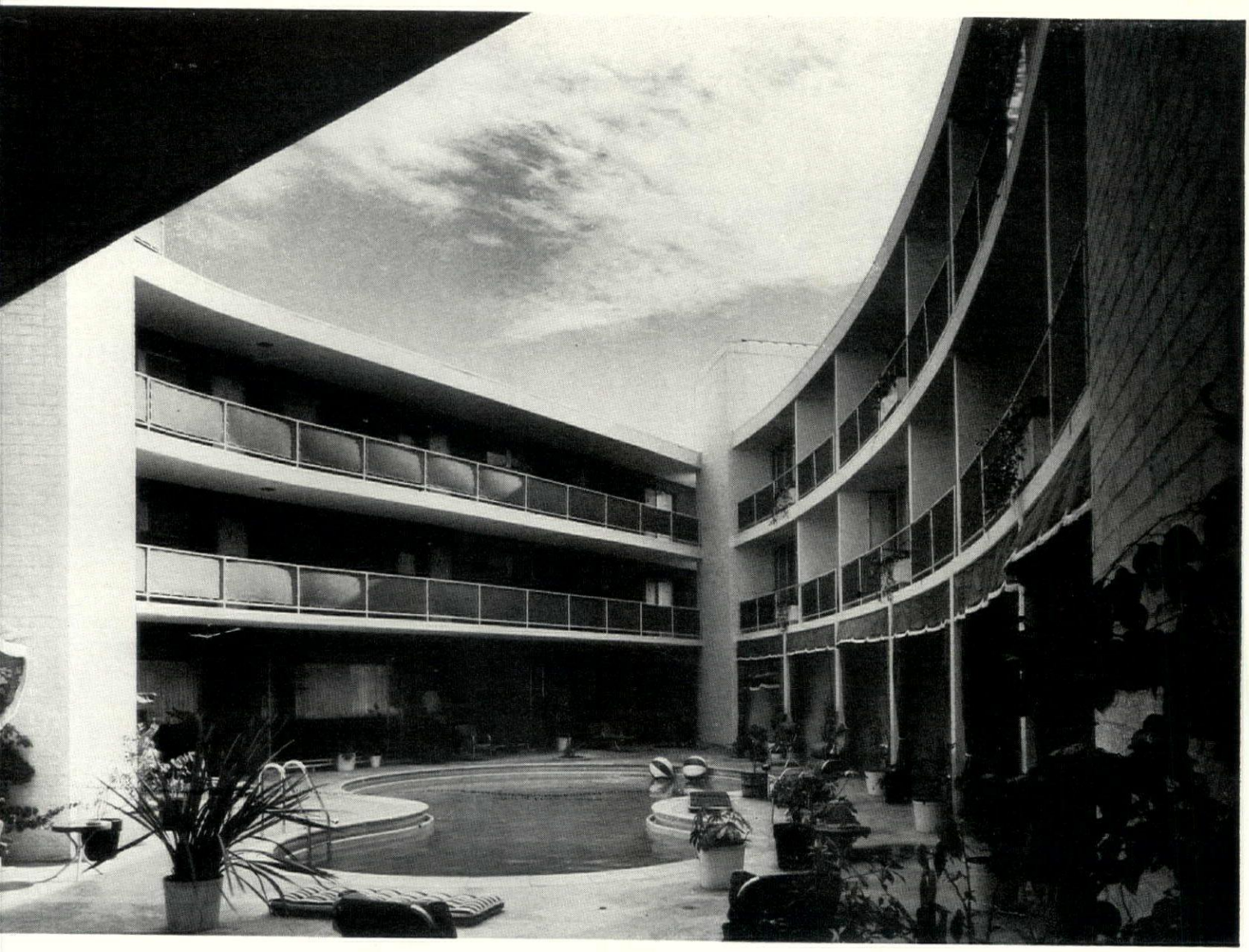




Many of the brick walls are left unplastered on the interior, and are painted in cool shades. The oversize brick used gives rooms an unusual scale. Rooms rent for from $5 single per day.

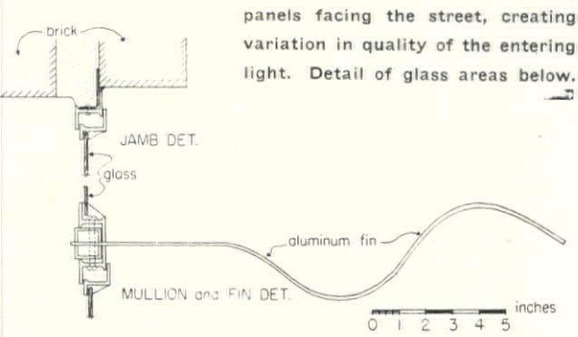


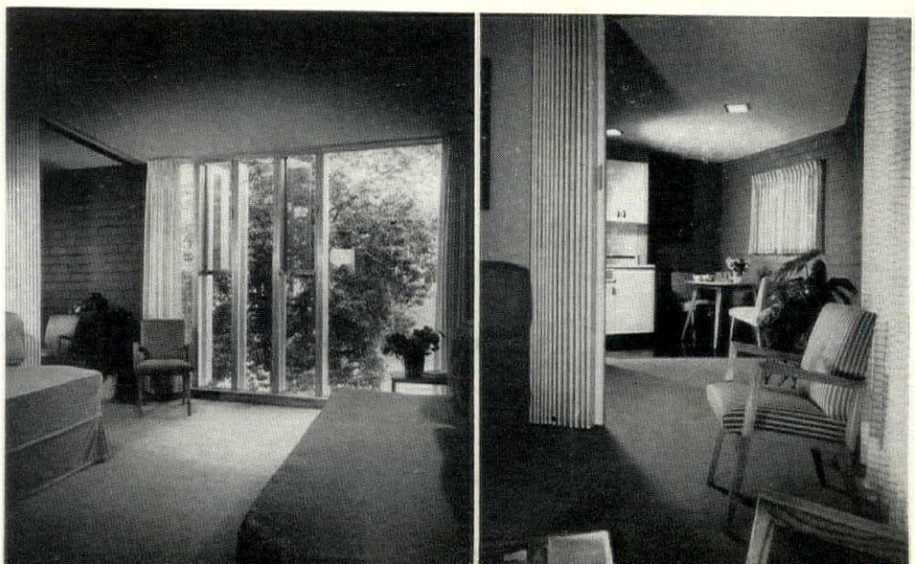
bits the same design posture and colorful finishes as exterior elevations

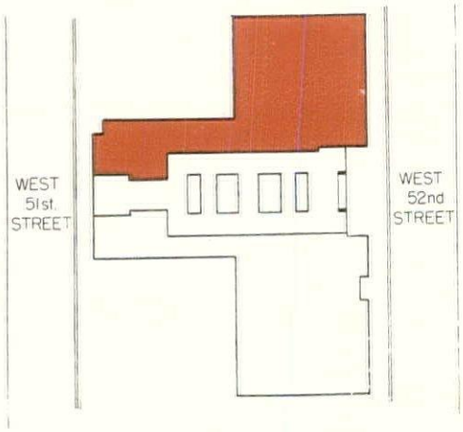


Enclosed court for swimming pool is necessarily cramped but makes a pleasant view for passageways and porches of apartments above.

Fixed aluminum fins, in uniform curves, are set in parts of the glass panels facing the street, creating variation in quality of the entering light. Detail of glass areas below.



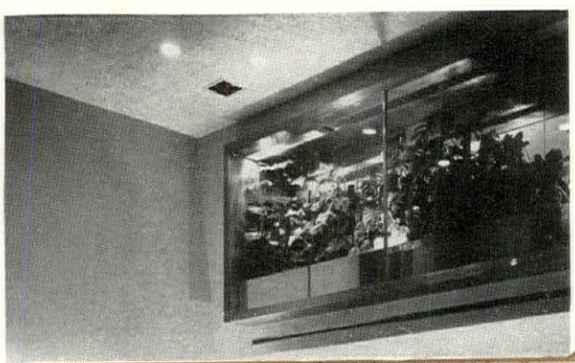






SECOND FLOOR holds dining rooms for Esso executives and third kitchen. Deep green columns match carpet. Chairs are red-upholstered.

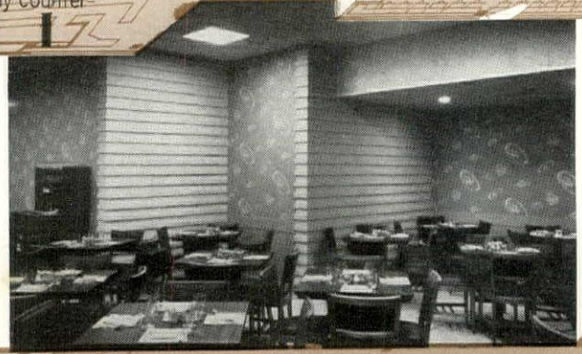




MEZZANINE service deck, screened by mirror and green planting, provides food and stock preparation for fountain below.



MAIN DINING ROOM entry is along fountain (l). on Plaza side. Floor back of fountain is dropped, permitting normal chair height.

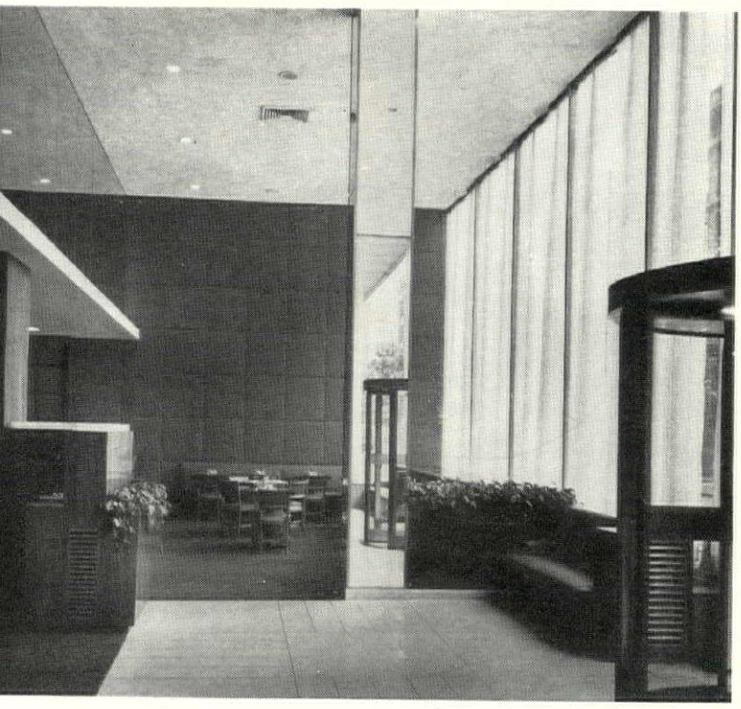


BASEMENT holds Esso employees' dining room (l.) with counter, Schrafft employees' dining room and kitchen for both.

ESTAURANT IN ROCKEFELLER CENTER

The biggest Schrafft's—built to satisfy the mid-day hunger of thousands

CARSON & LUNDIN, Architects
JOHN W. HARRIS ASSOCIATES, INC., Builders
FRANK G. SHATTUCK CO., Operators





Photos by Gottscho-Schleisner



This block-long restaurant occupies nearly half of the ground floor space in the new 33-story Esso Building, latest addition to New York's Rockefeller Center group. Described by its owner, Schrafft's, as "the world's largest service restaurant," it is of a size appropriate to an area in which superlatives extend even to the "world's longest" chorus line. The figures give the clearest picture of the magnitude of this design job: there are 44,657 sq. ft. of floor space in which 1,283 persons can sit down to lunch at the same time, inhaling 80,000 cu. ft. of air per minute and served by 650 employees who manipulate 25,971 dishes, 9,431 glasses, 12,493 pieces of silverware and about 100 pieces of mechanical equipment. Operation of this giant apparatus with a minimum of clatter and a maximum of speed was, of course, the basic planning requirement. But the design solution is notable because it accomplishes this basic functional requirement with precision and at the same time gives this great area for mass feeding the intimacy and tone of a comfortable dining room.

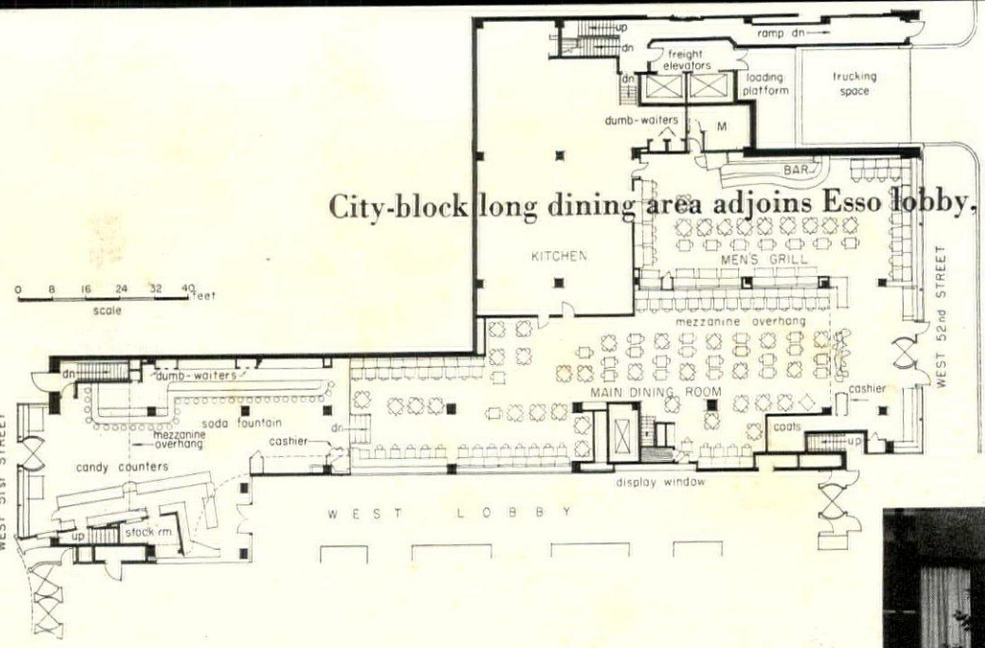
Green planting, mirrors, candles, soft light, polished brass—these are the pleasant familiars of many a family dining room. The architects, Carson & Lundin, have the distinction to be among the first to recognize that these traditional domestic decorative elements can play a rewarding role in the highly functional plan of a huge metropolitan restaurant.

Carson & Lundin, who were the Esso building architects, allocated ground floor space from the central lobby to the building's west wall for restaurant use. Thus the main dining area stretches from Rockefeller Plaza at one end (51st Street) to 52nd Street on the other and can be entered through handsome two-story foyers at either side. Above the major portion of the main dining area, where the floor is dropped a few feet, they hung a mezzanine service deck. Below, at the Concourse level, they located a special noontime dining room for Esso employees, utilizing the extra space under the main building lobby. A second floor is allocated to private dining rooms for Esso executives. (These facilities are leased by Esso for certain parts of the day and operated by Schrafft's on contract). The western block of the restaurant area is a four-deck arrangement of kitchens, bakery and other service facilities, connected by freight elevator and four speedy dumbwaiters and with the immense advantage (and civic boon) of an off-street unloading bay.

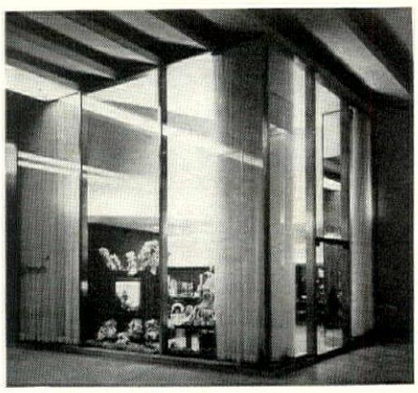
Carson & Lundin's excellent wedding of decorative and mechanical requirements is particularly apparent in the handling of the entries. The green-planted and mirrored walls of the mezzanine deck are a highly decorative feature of both foyers. On the Plaza side, the mezzanine is equipped to provide stock and food preparation for the soda fountain below, since the more usual basement service area was pre-empted by the Esso dining room.



City-block long dining area adjoins Esso lobby,





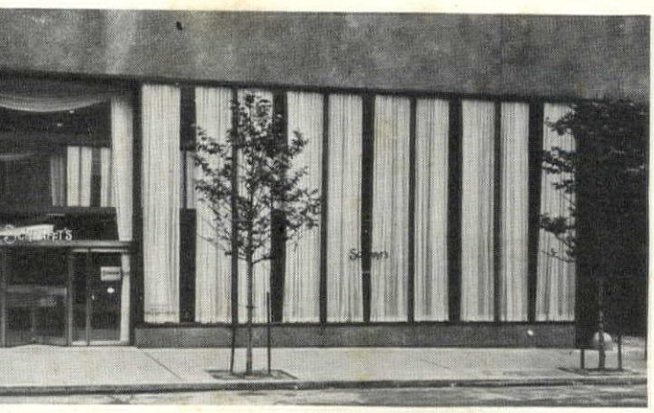


PLAZA ENTRANCE solves problem of how to hang awning over high clear glass front by concealing awning box in the soffit of the bronze overhang 18 ft. above the sidewalk. When a button inside the shop is pressed, box drops slowly down to normal height about 9 ft. above sidewalk and scissor-type awning then operates in normal fashion. Entrance from Esso lobby (r.) feeds into same foyer, which holds soda fountain, candy and bakery counters. Dining area is dropped a few feet, separated by heavy mesh bronze rail.

Ezra Stoller: Pictorial Serv



tory street entrance at each end

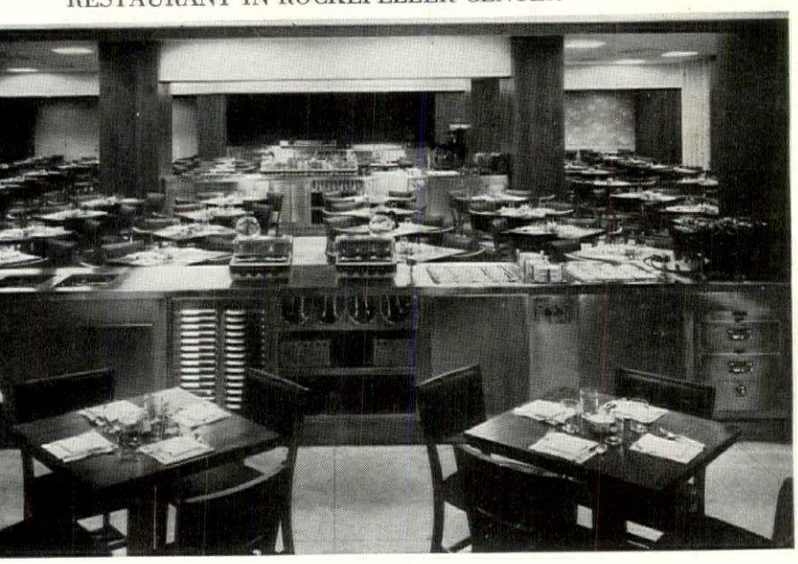


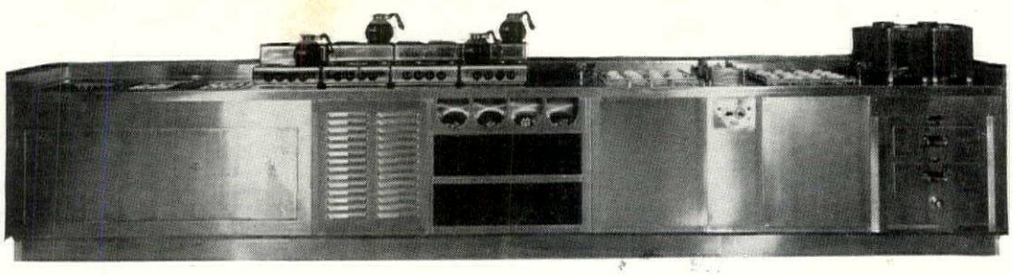


52ND STREET FACADE shows massive two-story windows, in appropriate scale to 33-story building. On this side, two-story treatment of foyer extends over portion of men's grill room (above), which adjoins bar. The architects' use of leather (3 ft. sq. panels) on this wall is one of several devices ridding this Schrafft's of any vestige of the Helen Hokinson feeling. Unusual amount of planting is apparent in the gold-finished bronze boxes (below) which line curtained windows on Esso lobby side of dining room.

Other photos: Gottscho-Schleisner





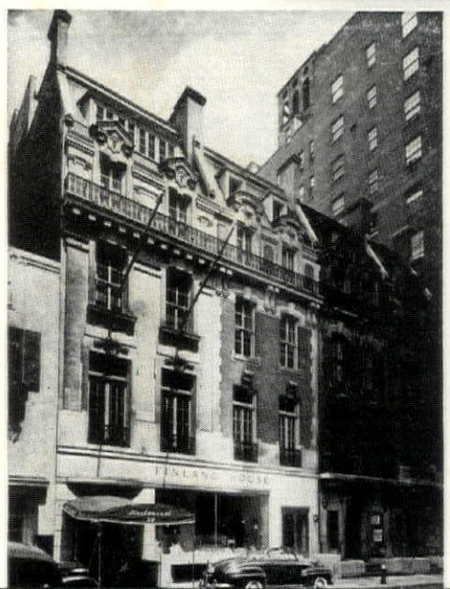


MAIN KITCHEN is on basement level and is laid out for usual radial pick-up, with waitresses entering through electric-eye doors. To relieve waitresses' maximum 225 ft. hike to kitchen, special service units (above) are set up in Esso basement dining room. These serve beverages and silver, two hot soups and hot rolls. The three kitchens which enable Schrafft's to serve 7,500 meals a day depend principally on an immense amount of mechanical equipment designed to the order of the Frank G. Shattuck Co. Lowerators, thermostatically controlled for proper temperature, holding plates in a magazine and automatically lowering them for steam table service, are only one example.

FINISHES AND EQUIPMENT: Sound insulation (dining areas)—Acoustone, Johns-Manville Corp.; (service areas)—rockwool. Simplex pans — National Acoustics. WINDOWS: Sash — bronze. Glass—plate, Pittsburgh Plate Glass Co. HARDWARE—P. & F. Corbin Co. ELECTRICAL FIXTURES—Gotham Lighting Co., Edward F. Caldwell Co., Cold Cathode Lighting Co. PLUMBING FIXTURES — Crane Co. FOUNTAIN AND BAR — United Fountain Corp. KITCHEN EQUIPMENT — S. Blickman, Inc., Ershel & Krukin, Inc. HEATING—steam with chilled water air conditioning system.



Photos by Ben Schnall



FINNISH RESTAURANT

New examples of Scandinavian craftsmanship in food, brass, and wood are brought to New York in this impressive import

AARNE ERVI, Architect
MAGOON & SALO, Associated Architects

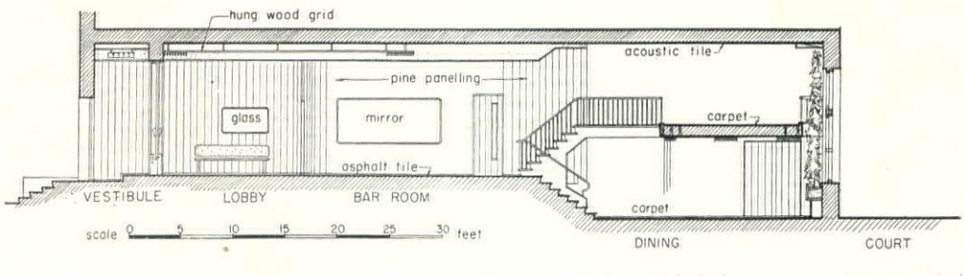
FINNISH RESTAURANT

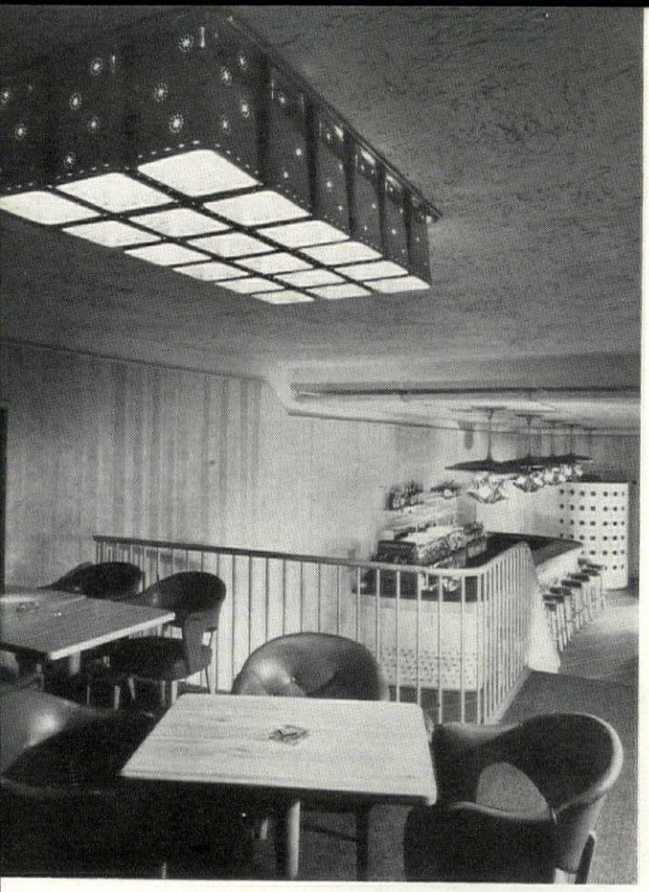
Some of the best and most meticulously run restaurants in New York are those whose dishes have a foreign flavor. This small Scandinavian kitchen is one of them. It is all from Finland—recipes, walls, furniture, and lighting fixtures. Detailed and completely fabricated abroad, it was shipped to this country in sections and assembled in place perfectly. Since it is imported, from a section of the world whose designers have had strong influence on our own in the sternly sympathetic use of wood, metal and leather, this job merits study. Some will no doubt consider it a projection of our present design direction. But if this is as effective as some other Scandinavian designs have been in influencing American work, it may be that there are complications ahead for our designers. For in much of this job, the quality of hand craftsmanship has been recalled. Not the artsy brand of craft, but a very careful controlled lightening of the severity of forms and textures. Whether this country is equipped with the superlative craftsmen necessary to follow the designer in this direction is doubtful. Besides the brass lighting fixtures, the item of principal interest in both establishments is the matched modeled pine paneling, very thin veneer backed to prevent warping. Inlaid tables further exhibit the fine Finnish talent for wood. Finland's art and craft products are sold in the two floors of shop space adjoining the restaurant.



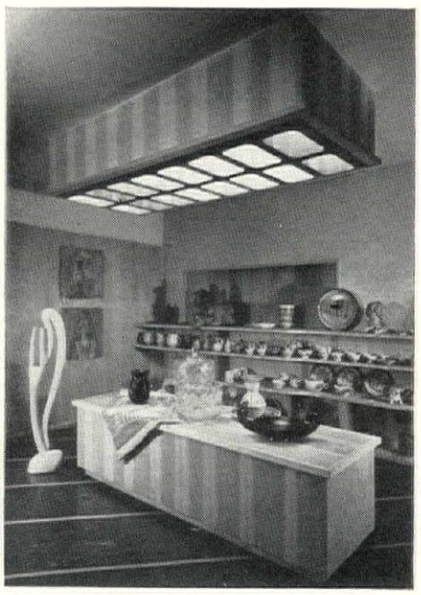
BAR FROM STREET END; WOOD SLATS DECORATE THE CEILING AND ALSO MUFFLE NOI

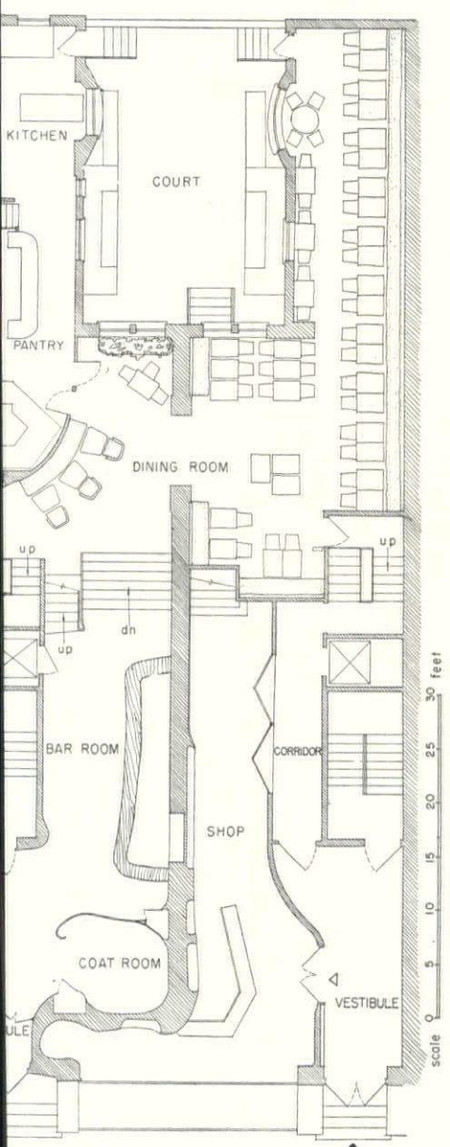
LONGITUDINAL SECTION

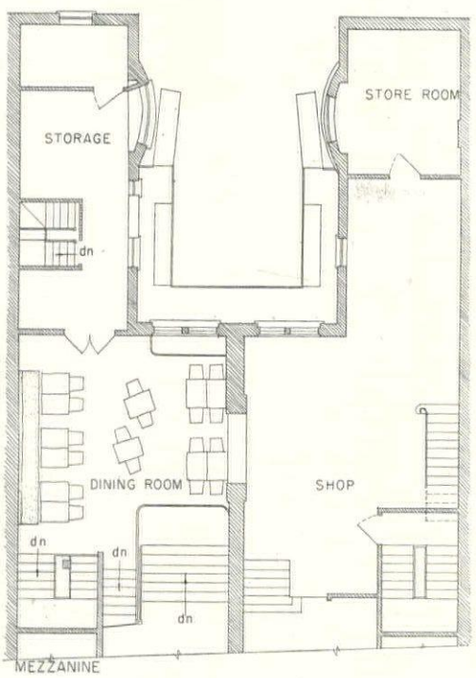




ZANINE AT REAR HOLDS INTIMATE COCKTAIL LOUNGE

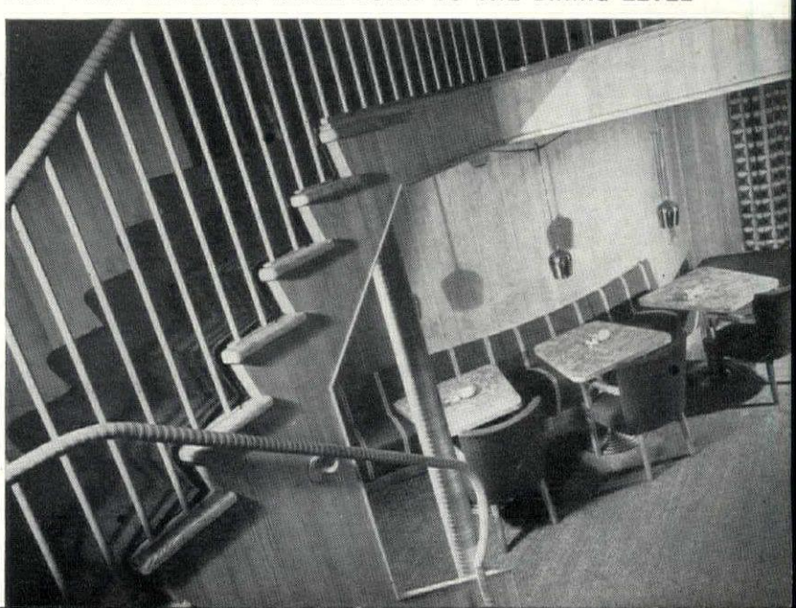






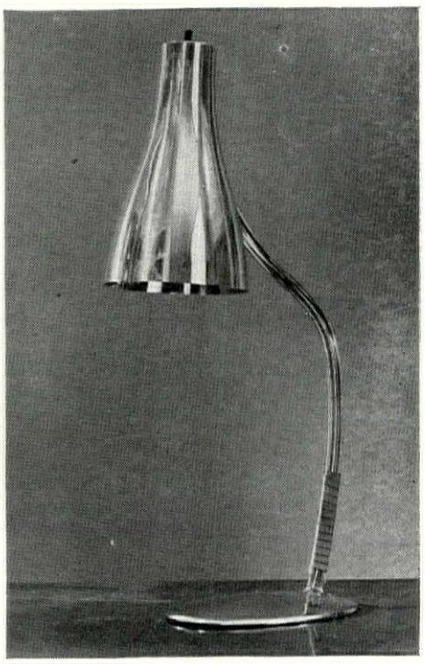
Shop for Finnish products, including lamps by same designer who did those in restaurant, is next to restaurant. Two glass panels connect the two sections visually: design is similar.

VIEW FROM ENTERING LEVEL DOWN TO THE DINING LEVEL



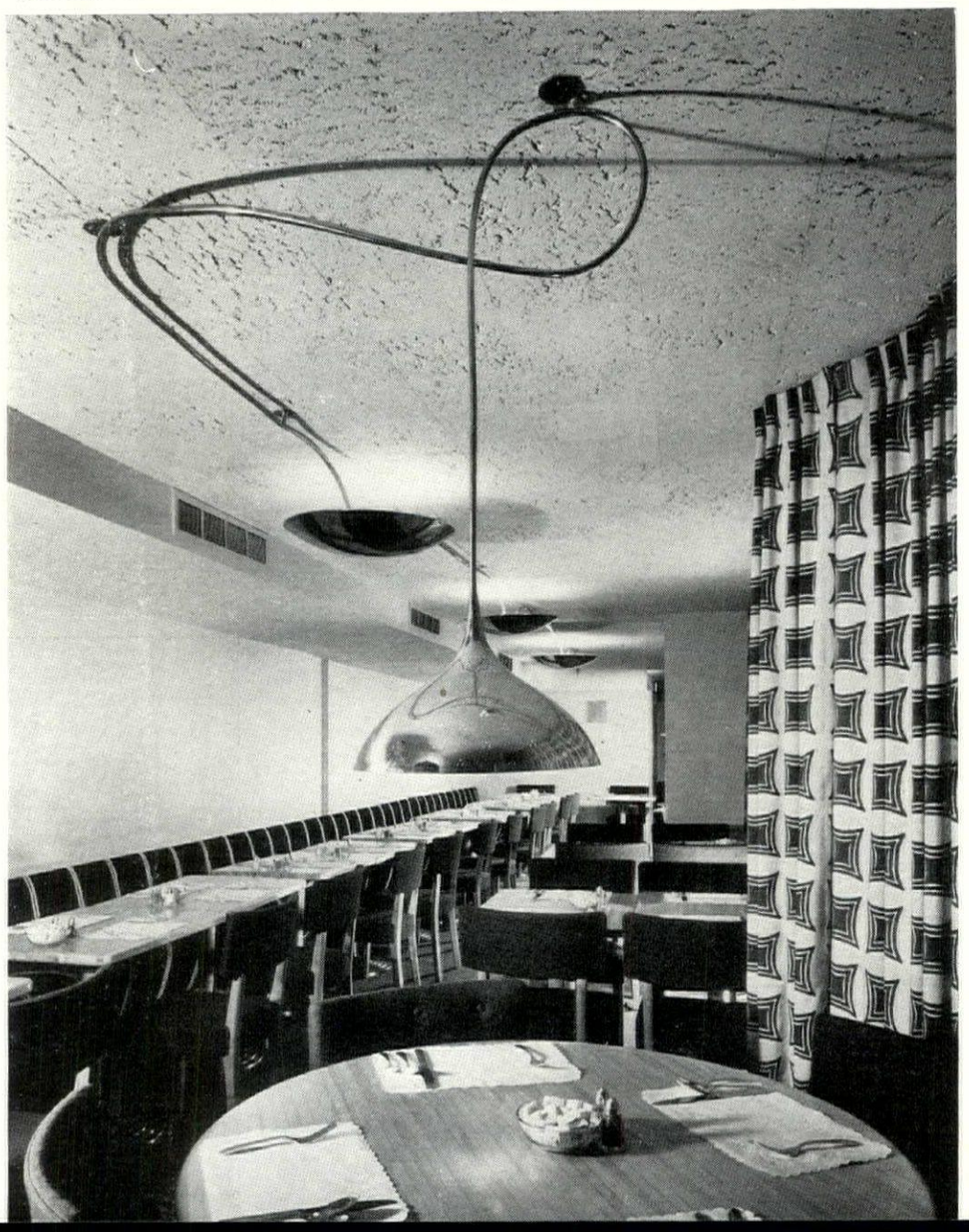


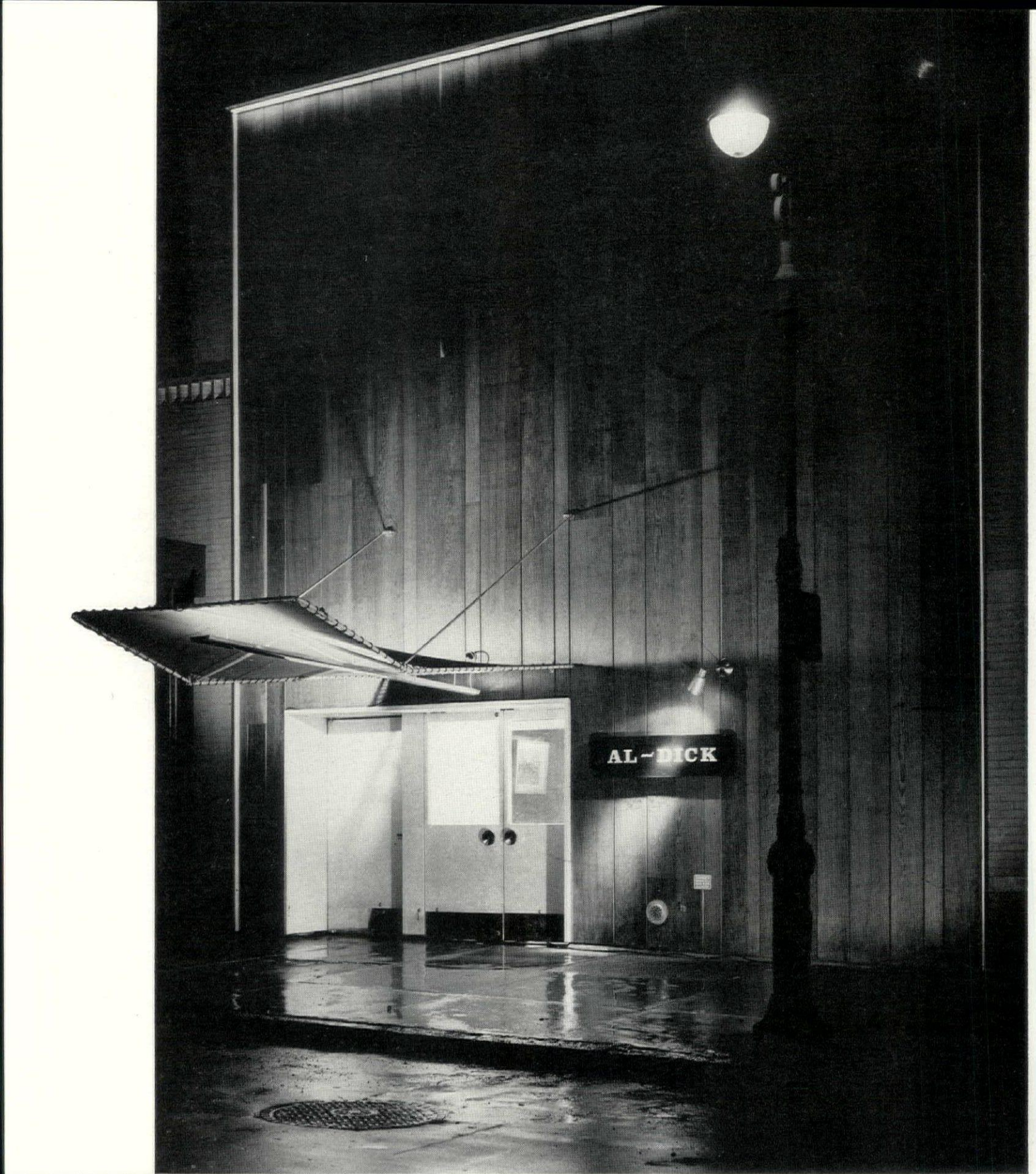
MAIN DINING AREA; MULTIPLE CEILING FIXTURE IS OVER THE HORS D'OEUVRE TABLE



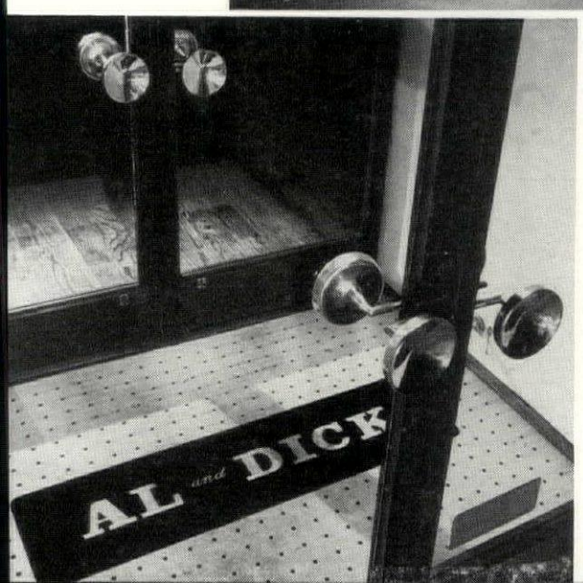
BELOW, DINING ROOM; RIGHT, TABLE LAMP

Lighting fixtures were designed by Paavo Tynell and made, as were most furnishings, in Finland. Formed of polished brass in shapes not rigidly perfect, they are dramatic, even exciting elements in the calmly designed restaurant and shop. In the photograph immediately to the right, which is taken from the far inner corner of the dining room, the graceful curving stem of the fixtures is not merely decorative, although judging from its success it would merit being put up solely for effect. But the stem also carries the conduit the full length of the room. Tynell's lamps are sold in the Finnish shop, and he does work in Finland on order. Presently vague plans exist for him to set up a plant in this country.





Photos by Ezra Stoller: Pictorial Services



BROADWAY STEAK HOUSE

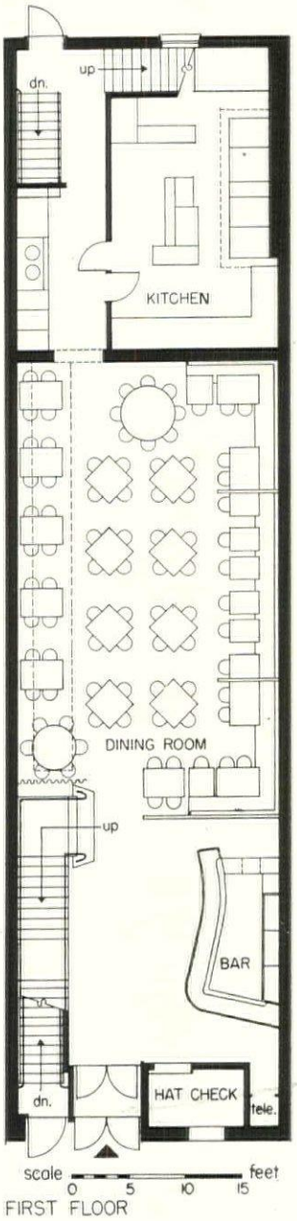
Two New York restaurateurs pick two good architects, back them with $200,000, and come out away ahead

GEORGE NEMENY and A. W. GELLER, Architects

GREAT EASTERN-VICTOR CORP., General Contractor

Architects' staff: M. Shapiro, F. Greenhaus and V. F. Christ-Janer

BROADWAY STEAK HOUSE



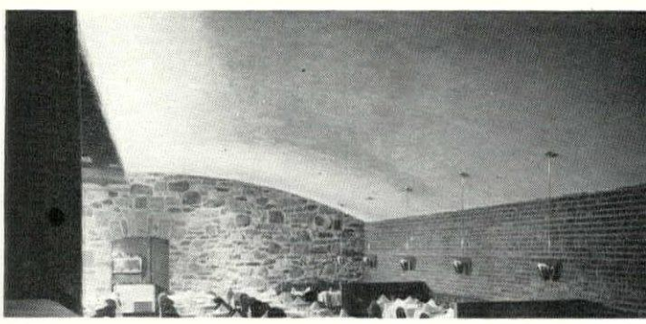
FIRST FLOOR

There used to be a saying that all a Broadway restaurant needed to be successful was good coffee and clean restrooms. This Broadway restaurant is an effective notice of change in requirements. Once the site of Texas Guinan's place, where a sucker was recognized and appreciated, and Helen Morgan's, where a song was just a song but a piano was to sit on, the place is now occupied by one of the island's better steak houses.

The design of Al and Dick's Steak House exemplifies an interesting point: Al and Dick intend to stay here for a long time. Materials were selected which will last and improve with wear. Everything has a hard finish but the steaks. Durability, a quality usually only nodded to in the design of restaurants, was really introduced here. And in the use of these materials, Al and Dick's architects have worked for warmth and the emphasis of craftsmanship. Their oak, nude brick, and fieldstone are in strong contrast to the high-lit brass lighting fixtures and other specially designed machine precision hardware.

There are two floors to the restaurant, the main dining room shown on this spread and an overflow dining room and private banquet room on the second floor, pictured on page 122. Most challenging plan problem was the layout of fire exits and passages in the existing building, without encroaching on valuable table and kitchen area. Nemeny and Geller did this by blasting a half basement out of solid rock.

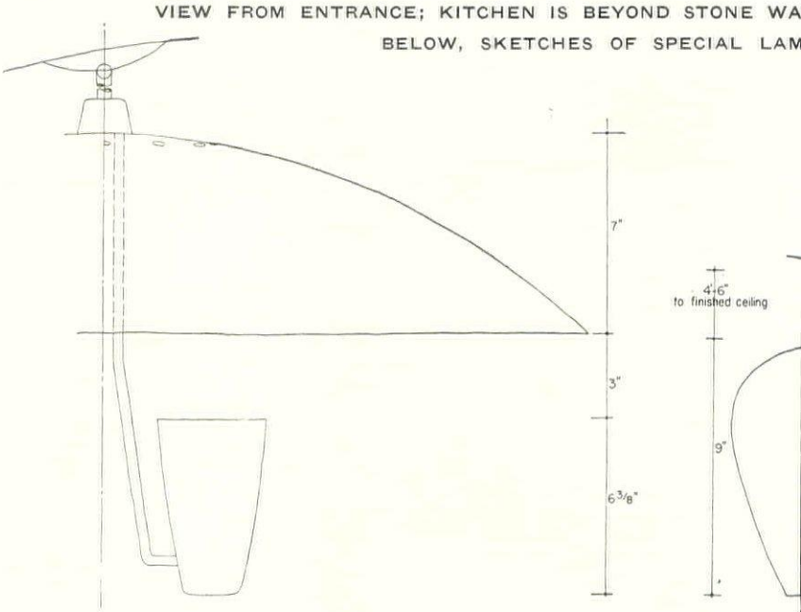
Typical of the knowing approach of the architects to this particular restaurant problem was their acoustical treatment of the dining area. They muted the dining din, but did not try to kill it, recognizing a certain level of noise as an advantage in this type eating room. The customers like this and seemingly everything else in the handsome design.


VIEW FROM ENTRANCE; KITCHEN IS BEYOND STONE WA

BAR HAS FRONT OF BIRCH WOOD SPLINES, MAHOGANY TOP



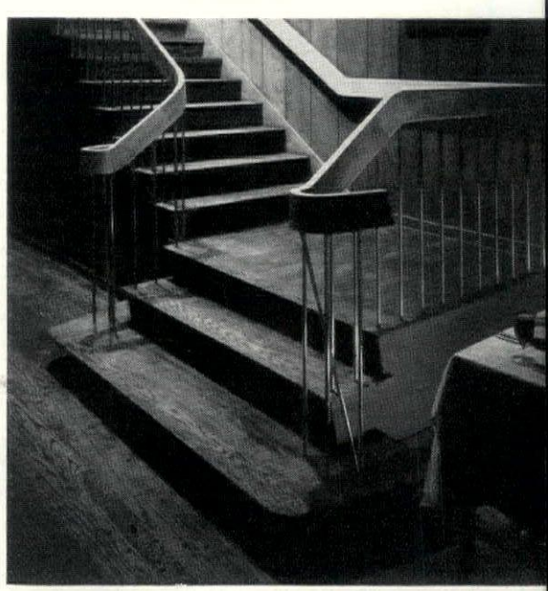
BELOW, SKETCHES OF SPECIAL LAM



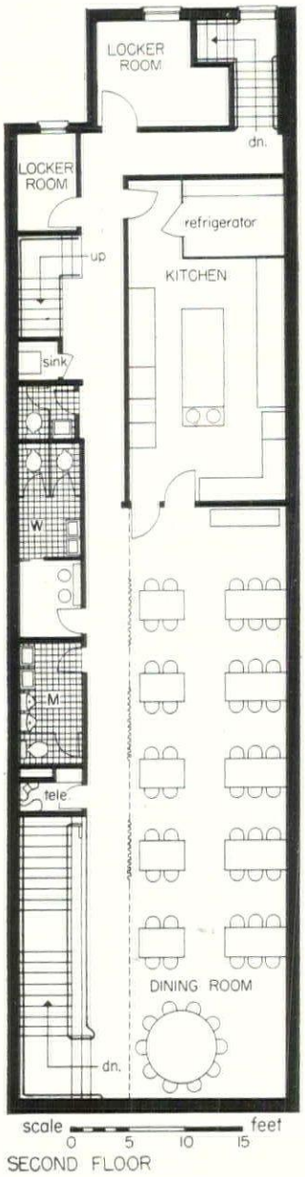
EW FRONT THROUGH KITCHEN OPENING; ARCHED ACOUSTIC CEILING DELIBERATELY DULLS BUT DOES NOT DEADEN HUBBUB

OPPOSITE THE BRICK WALL IS DOUGLAS FIR WALL, HUNG WITH PHOTOS



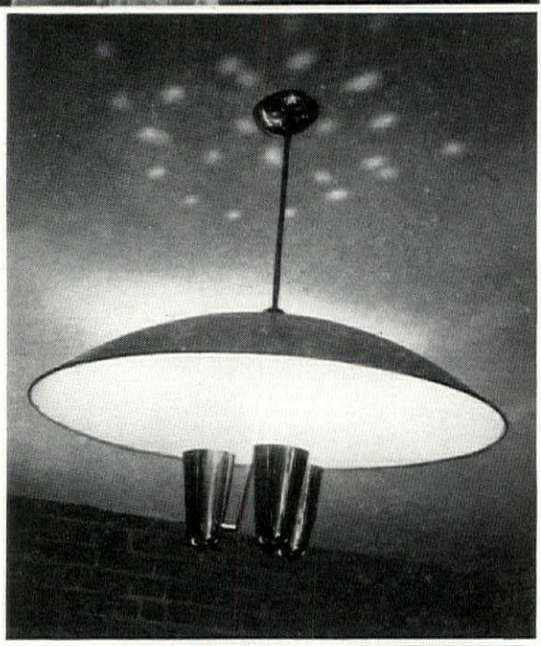


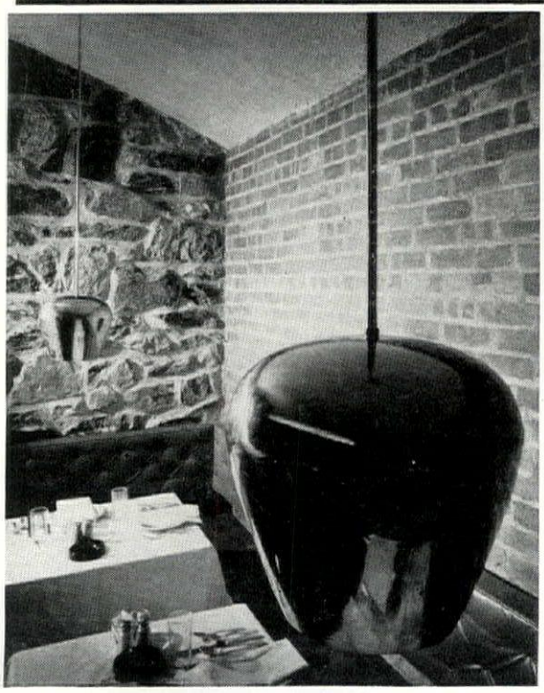
BIRCH HANDRAIL SITS ON COPPER RODS



SECOND FLOOR







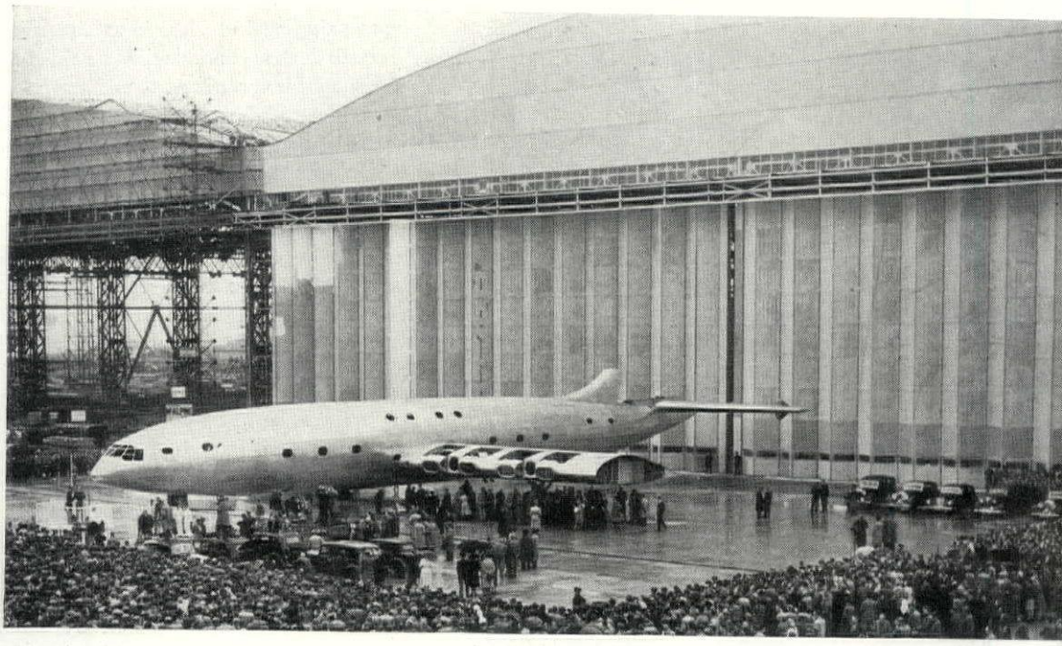
Some lighting fixtures in this job bear striking family resemblance to those in the Finland House (page 115) a nearly simultaneous job, providing a good example of parallel design. Both designers hung inverted brass goblets, recognizing the flattering nature of light reflected up from a table-top. Upstairs banquet room fixtures (photo above) are another good solution to the problem, using high diffused light. Main bar fixture downstairs (right) plays a pattern on the ceiling through the perforated reflector.

FINISHES AND EQUIPMENT: Exterior—redwood planks. Floors—pegged oak, Mengel, U. S. Plywood Corp. WALL COVERINGS — Douglas fir, Fabricone, A. B. Wiggins Sons Co., fieldstone or brick. BARS—mahogany, birch or ebonized wood, S. & S. Woodworking Corp. HARDWARE—Sargent & Co. and Elmer T. Herbert. KITCHEN EQUIPMENT—H. Friedman & Sons. AIR CONDITIONING SYSTEM—specially built unit to meet compact requirements. Refrigerating machine—30-ton, 30 h.p., Brunner Mfg. Co. Type B vane-axial flow fan—Buffalo Mfg. Co. Controls —Minneapolis-Honeywell Regulator Co. Installation by Coldstream Conditioning Co.

HE WORLD'S BIGGEST DOOR—

1,045 ft. long, 65 ft. high, 220 tons





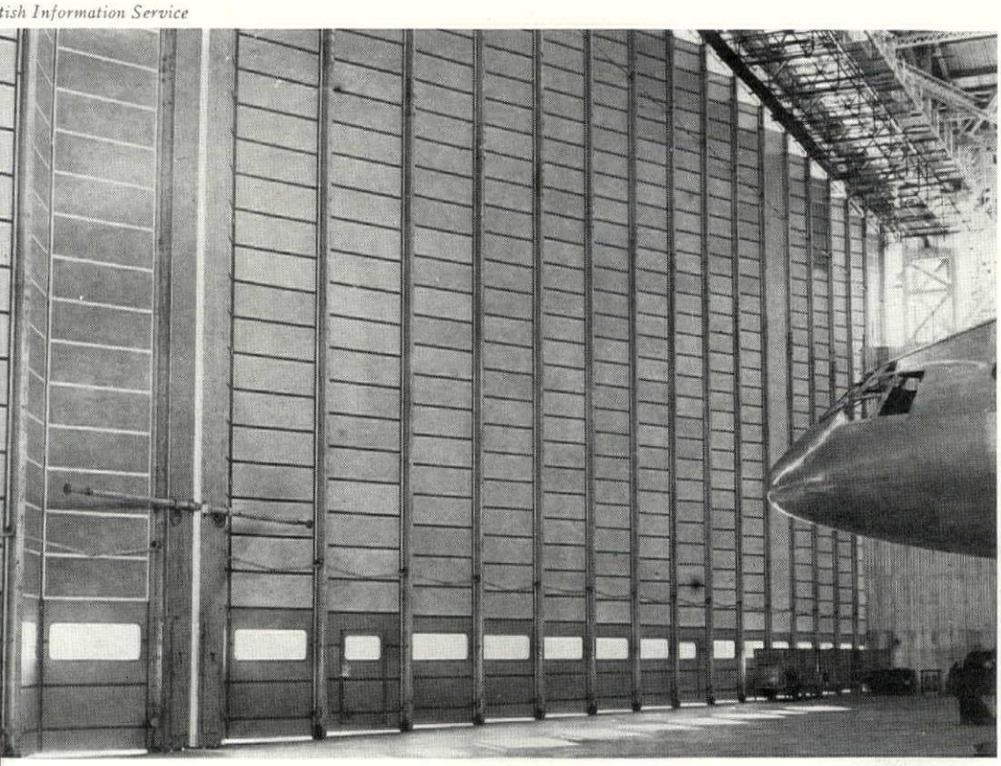
PUSH BUTTON CONTROL opens, closes each battery of doors within two minutes. Door never closes flat, but retains corrugated plan for strength against wind pressure, and to ease the overcoming of initial resistance to moving.

The gigantic movable screen which fronts this new aircraft assembly hall in Filton, England, is one third of what is planned by its builders to be the biggest door in the world. When finished, the door will stretch in sections along a frontage of 1,045 ft., opening three bays of the partially completed structure shown above. Photographed when only the center bay was complete, the door and building eventually will be three bays wide. The huge folding-sliding screen, which stands 65 ft. high and weighs 220 tons, was built by the British firm, Eassavian Ltd. Materials are aluminum and specially extruded sections of marine alloys.

The tremendous hangar is being utilized to assemble and house England's biggest land plane, the 110 ton Brabazon I airliner. Floor area of the $7,000,000 hangar when complete will be 8 acres; the concrete apron before it covers 6½ acres more, and a runway 100 yds. wide and 2,750 yds. long is necessary for the flight of the great flying fish.

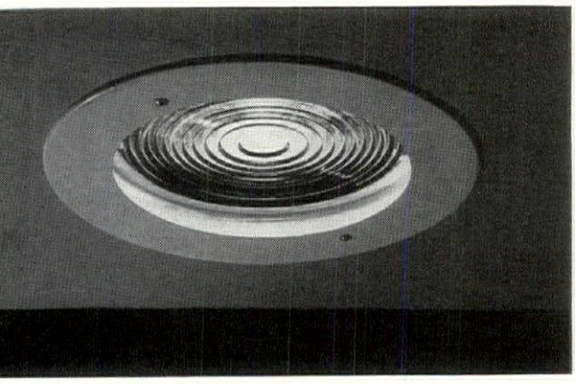
The door is in six sections, or batteries, two shielding each bay of the hangar. Each battery can be opened in either direction, so that three openings each more than 330 ft., or six openings each exceeding 142 ft., may be made along the long front. Each is run by a pair of 5 hp. electric motors housed in the mullions at each end, and the entire door can be opened in two minutes. The motors are controlled by a three button control—open, stop and close. The doors are operated by stationary cables above and below, on which a winch in each mullion winds itself, the cables being arranged to give an equal pull top and bottom. Provision against ice formation or packed snow, which could so easily jam the comparatively light mechanism, is made by a system which circulates anti-freeze solution. Each main hinge automatically is soaked with anti-freeze when necessary, and a constant flow thereafter is controlled by a master pump.

tish Information Service

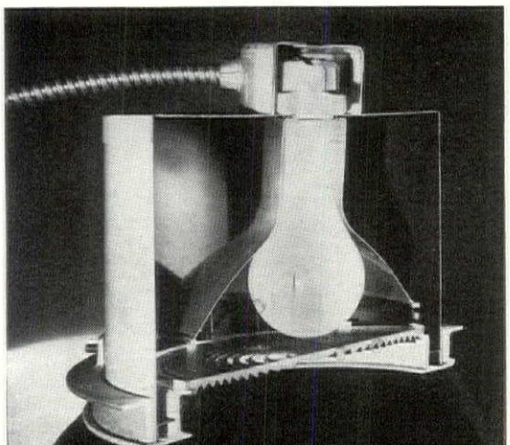


NEW LENSES FOR LIGHTING FIXTURES FIGHT GLARE by masking and diffusing the sources of illumination

Ben Schnall



GLASS DIFFUSING LENS for recessed spot fixture has pebble finished surface above, louvered surface below, with the vertical risers colored to cut glare.



The campaign against glare in artificial lighting installations is continued by a pair of new lens designs for incandescent and fluorescent fixtures illustrated on this page. Lightolier Company's new line of architectural luminaires includes a specially molded glass lens for recessed spotlights which kills most of the glare apparent from the usual angle of visibility, and also several new plexiglass diffusing lenses for fluorescent fixtures.

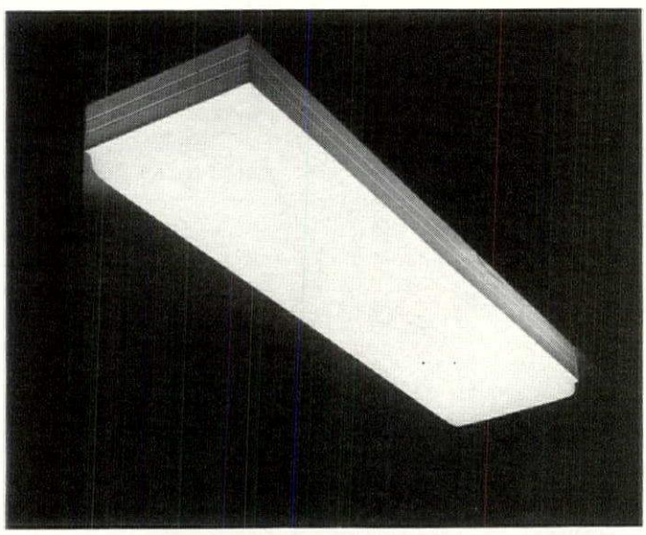
The first of these, the spotlight lens, is cast with a pebble finish on the side nearest the incandescent bulb, and a series of rings with vertical risers on the down side (see photo, left). The risers serve the same purpose as the metal cross fins which are used in many spotlights, shielding the apparent glare when the lens is seen from any angle other than directly into the light source. Lightolier calls this the "Calcu-lite" lens, and presents it in a new recessed fixture which also boasts a new "Alumilited" precision reflector. A similar lens is marketed by Century Lighting, Inc., in both round and square shapes.

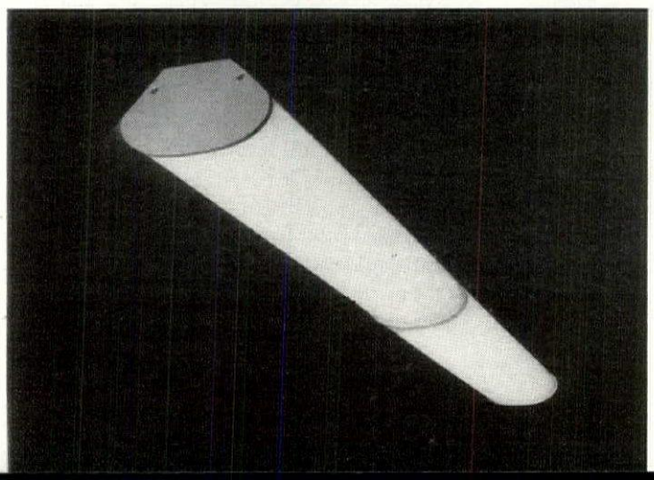
These lenses are available in plain unfinished glass, or with painted risers, in black, coral, or white, which provide more nearly opaque breaks to the side glare than unpainted risers. Black risers have been found most effective, but coral has been preferred by many buyers for its "warming" effect. The lenses are designed also to increase light dispersion by enlarging the diameter of the horizontal surface lighted and softening the boundary of the light pool. The "Calcu-l has a cone of useful light of about 45°, ab midway between the usual hard spotlight be of 30°, and flood light beams of 60°. The ture's new reflector is claimed to step up l output considerably.

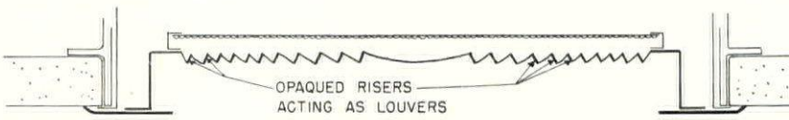
Lightolier produces sizes of the reces fixture with lens diameters of 4 in., 6 in., 9 and 11 in. to accommodate bulbs of watta ranging from 75 to 500. Century has 3 6 in., and 8 in. diameter lenses, and a 12 square lens with proportional lamp watta Lightolier's approximate price for the 75 100 watt, 6 in. unit, is $14.75. Century's p for their 6 in. unit is $14.50.

Lightolier's other new line, the plexig diffusing lenses for fluorescent fixtures, claimed to have an 80 per cent transpare co-efficient. Their homogenous milk white ish cuts surface brightness greatly, and shaped to maintain a neat, clean appeara The manufacturer claims them to be the plastic diffusers available for lighting which are dimensionally stable and will discolor. The result of eight years of tests cited to back the claim.

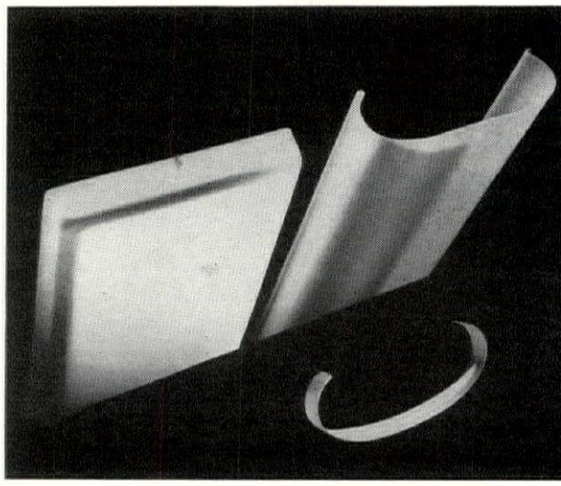
The plastic diffusers are available in a v ety of shapes and sizes—rounded, flat, cylindrical, for mounting recessed, suspen or flush with the plane of the ceiling. T can be installed as individual fixtures or continuous strip. In the strip lights, a pla joining piece (see photo below) is used create an unbroken line of light.







SECTION THROUGH GLASS LENS, above, shows mechanics of design effort to sh nearby eyes. Plexiglass diffusers, for use on fluorescent fixtures, come in a numbe long shapes. These diffusers can be "snapped on" the fixtures and will stay firml place since the plastic has a tendency to remember its original flat shape. Plastic joi piece, shown in photograph below, unites sections of diffusers to form unbroken st

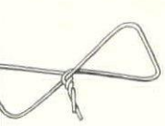


RESIDENTIAL SOUND INSULATION STANDARDS in England are revised after study by Department of Scientific and Industrial Research; two-leaf party walls, cavity concrete walls, membrane walls and double frame houses result

he Great London Fire of 1666 was responsi-
e, quite by accident, for setting an excellent
und insulation standard that existed in
ngland right up to the first world war. The
wers-that-were in London after the Great
re ordered that party walls between build-
gs provide a six-hour fire stop. Specifications
lled for 9 in. of brickwork "or other incom-
stible material." This mass of material
cidentally provided a sound reduction fac-
r of about 48 db. Not until the first world
ar was this requirement relaxed and then
ly because the need for new housing was
very great. In the middle of the last war,
study committee recommended minimum
ndards for building performance in thermal
d sound insulation, strength, lighting and
e resistance. War experience in fire fighting
dicated that a one hour party wall was ade-
ate for fire resistance. Sound reduction,
wever, was increased to 55 db. The new
ndard was set because with the advent of
dio in the 1920's, a 48 db. wall was more
en than not inadequate. These recommenda-
ns were now being carried out by the De-
rtment of Scientific and Industrial Research.

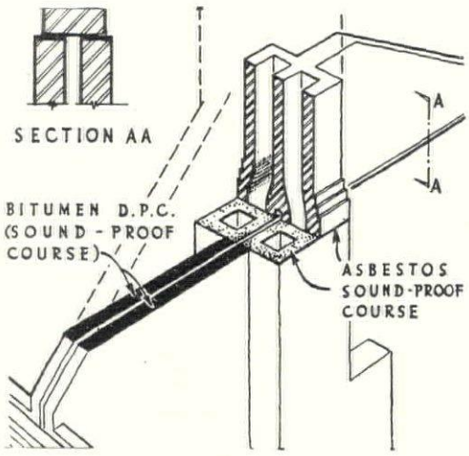
Ten years ago it would have been impossible
design and build a simple party wall that
uld provide a 55 db. sound reduction factor.
e answer, eventually, came from the labora-
y, but it was not until 1939 that a practical
stem was worked out in a single pair of
uses. It can be accepted as fact that a 55 db.
duction cannot be reached by any single,
id construction that is suitable and cheap.
would require 2 ft. of brickwork to give the
db. reduction now required. The solution
s to build a two-leaf brick wall with a small
space between. This type of construction
d been tried, but never successfully, because
was not recognized that vibrations are easily
nsmitted along the back and front walls of
pair of houses thus by-passing and making
ffective the party wall no matter how good
might be. This applies chiefly to highly con-
uous brick walls that are common in Britain.
ght frame walls do not suffer so much indi-
ct sound transmission.

The two-leaf wall is built either of brick or
light-weight concrete blocks. The concrete
cks need be only about 3 in. thick to give
e required sound insulation. The double
ick wall, however, is slightly heavier, gives
slightly higher value up to about 60 db. Ties
e built in to join the two leaves, both in the
ter and party walls, at a spacing of 2 per
yd. Best ties, from the standpoint of sound transmission insulation, are of stout galvanized wire, shaped like a butterfly with its wings built into each leaf.



rip steel ties also are used, and in some areas
quired by code, but they are not as effective
the wire tie.

Of course, insulation would fail at the chim-
y if this, too, were not divided. A layer of thin, cheap, soft asbestos cloth is laid over the whole mortar joint just below the point where



the two stacks come together. This prevents vibrations from getting out of one leaf into the other. It is also important not to have rigid joints around doors and windows; if sound gets into the outer leaf of the outer wall, it will travel along easily and be transferred into the inner leaf of the next house.

Sound transmission along the foundation walls is not serious enough to worry about, though for dampproofing, bitumen felt is often used at the bottom of each leaf and this undoubtedly helps insulate the vibrations to some extent. Roof purlins running across party walls at the top do not seem to matter to sound insulation either, nor does the wall plate at eaves level.

The foregoing has concerned the ordinary house. Newer houses in Britain are being constructed with steel framing and here the difficulty arises because there are main-frame members common to the adjoining houses. Often there is a beam at ceiling level downstairs and at eaves level. There are two possible ways of licking the vibration problem in this type of construction. One is to insulate the inner lining of each house from the frame and the other is to interrupt the frame itself, which means making the frame for each house separate so that in the party wall there are two frames. This would be too expensive for sound insulation alone but it also has real usefulness in fire resistance. When one of two houses having a common steel frame catches fire, there is great danger that the damaged frame of the one will bring down the party wall and allow the fire to break through easily. This would indicate that the whole frame in each house should be given the full time rating for fire resistance required for the party wall or that the frames be separated so that if one collapses the other is left undamaged.

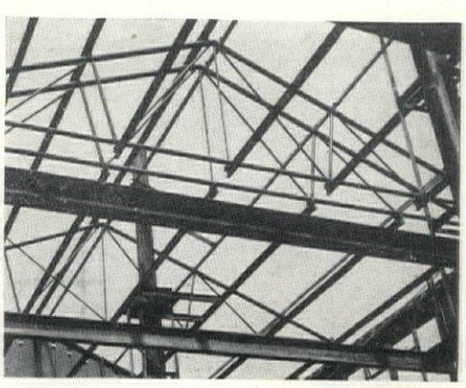
The best known types of houses with separate steel frames are like those shown in the photograph to the right. Here the party wall is a two-leaf affair with clinker concrete connected only at ceiling levels downstairs and upstairs with a sheeting of some kind. The outer wall is a frame construction. The chief point requiring care in this construction is the junction between the two leaves of the party wall and the external skin of the outer wall. If a thin sheet material is used for the latter, there is no danger of transmission by the sheeting but it is difficult to make an air-tight joint at the ends of the two leaves, and sound will leak through. If the brickwork is used, too good a joint will cause the same trouble. A layer of thin asbestos paper or asbestos felt can be used in this joint to prevent sound transmission.

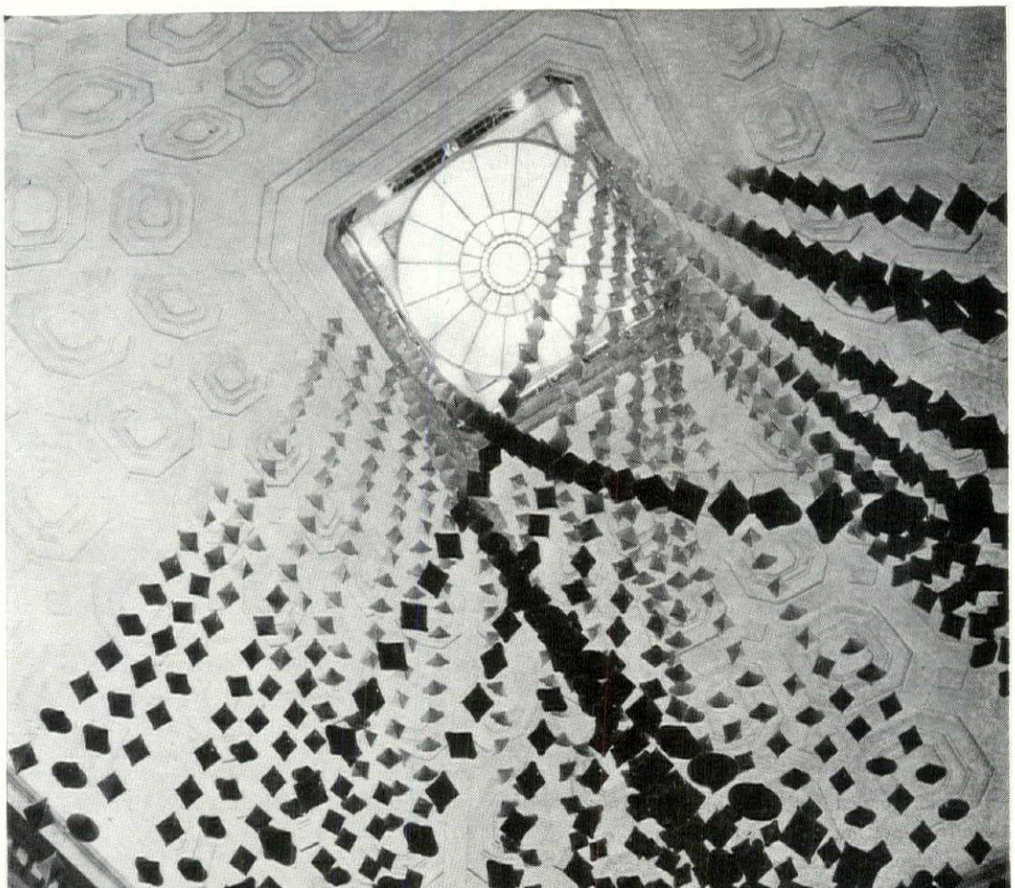
Another type of double-frame house is of prefabricated reinforced concrete. The inner lining is usually of some such material as clinker concrete blocks built solidly to each frame. The danger of sound transmission in this type of construction arises along the outer shell which is of 2 in. dense concrete blocks. To avoid transmission at this point, bitumen felt strips are inserted between the blocks and frame to insulate them.

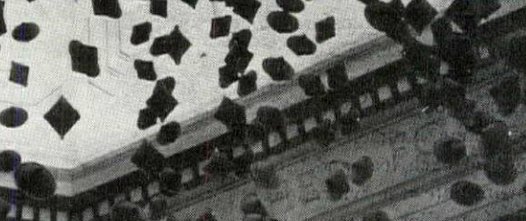
Another popular new type of house in Britain derives from post-1918 types. It consists of cavity party and outer walls of cast-in-place concrete. The outer leaf is a dense mix and the inner of clinker concrete. Here inner and outer leaves are solidly joined around the windows, and indirect sound transmission via the outer leaf is prevented by interrupting the latter opposite the party wall. This system is known to give very consistent insulation at about 55 db. reduction. The two leaves of the party wall are 3 in. thick.

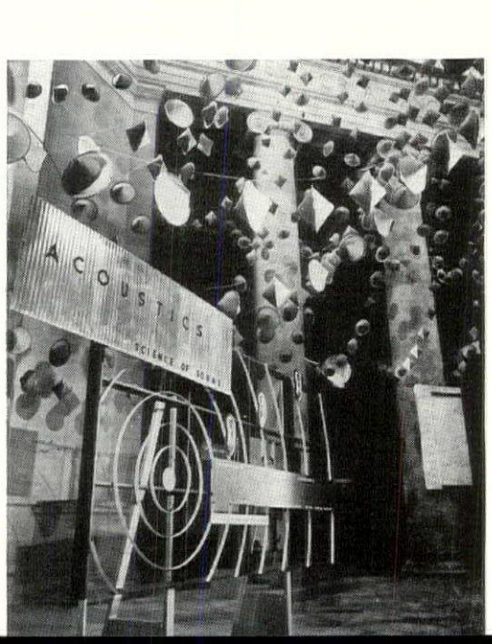
Two other systems are quite interesting, but they have not as yet gone into production. One has two 2½ in. clinker concrete leaves with a fairly wide space between them—about 5 in.—and so far as sound insulation is concerned, is more like a laboratory specimen than ordinary house construction. The second has three membranes. Two are 1 in. wood wool membranes and the third a 2 in. wood wool membrane. This system gives 55 db. yet it weighs only about 15 lbs. per sq. ft. (including plaster).

A great problem in the field of sound insulation has always been that of economics, yet the British have found that in the traditional house where two 3 in. leaves of clinker concrete replace 9 in. of brickwork there is actually something of a saving in construction cost.









SOUND TRAPS may be used more sparingly in other applications than this recent exhibition at Massachusetts Institute of Technology, but with equal success. Sound impedient on the cones sponges noise, enabling new, greater measure of environmental control.

UNIT SOUND ABSORBERS—by the doze

In these pictures are shown part of a large s of neat new acoustical devices—easily erecte portable noise traps. These *functional sour absorbers*, as they are dubbed by their deve oper, Harry F. Olson of the research depar ment, RCA laboratories division, were p together by Johns Manville, and were phot graphed in use during a recent exhibitio held in a high-ceilinged hall at Massachuset Institute of Technology. Their job is to a sorb noise in an area where the level of sour is too high, or where the acoustic behavior ma be erratic because of the enclosing shape the building.

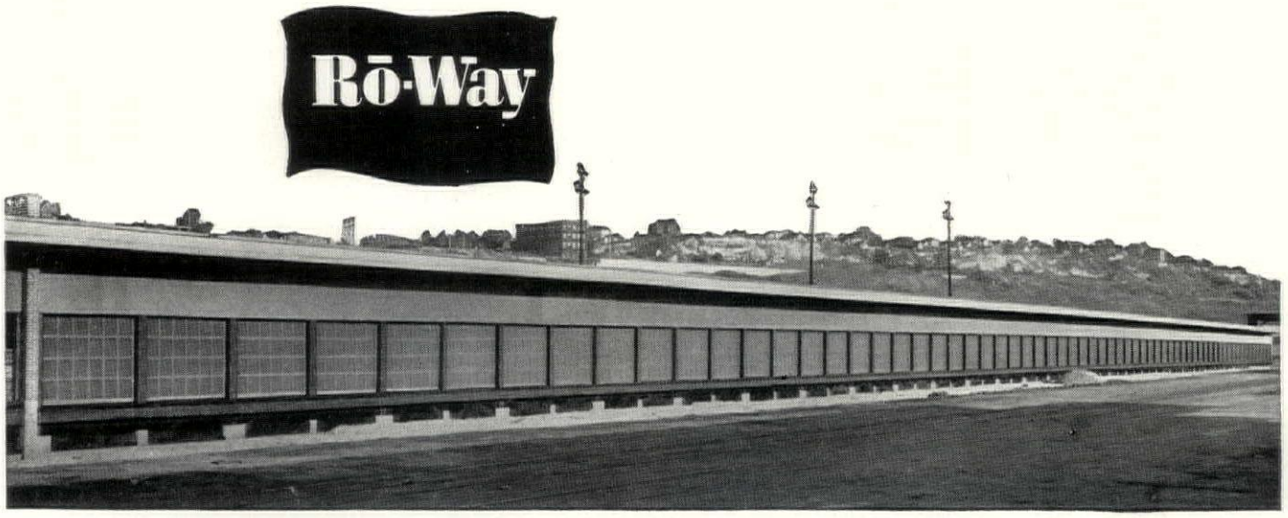
The functional sound absorbers illustrate here are made of a combination of shredde wood and a binder, which make a good acou tic impedance material, applied on a pair hollow cones which are fastened together ba to base. (See photographs.)

There were four different sizes studied e perimentally with base diameters of 7, 10, and 21 in. These illustrations show the 14 i size.

The sound absorbers do the job well, Olso says, although they are only a single desi step in the direction toward increased contr over aimless noise. Not only is their efficien in soaking up sound greater than many of t acoustic wall surfaces developed in the la two decades of increased attention to the noi problem, but there are also other advantag in their use. One great advantage is econom It is often cheaper to hang these cones than resurface a wall or ceiling. And in many stances when sound control is needed it impossible to hang acoustic ceilings, becau the workrooms or shops in point are lighted skylight. Functional sound absorbers cou perform the ceiling's acoustic function witho destroying the overhead light source. Still a other consideration is the possible versatil such devices might help bring to the acous environment in many rooms which are used various times for different purposes. A case point is that of a large room sometimes us for meetings addressed by one person, whe good sound transmission is important, and other times used for groups of many sm more intimate conversations. Less roman installations of these sound absorbers th photographed here, but equally effective on have been made in drafting rooms and m chine shops with comparatively low ceilin

At the conclusion of a paper on these fun tional sound absorbers, their developer emph sizes the potential: "It appears that there a wide-open field for improvement in the exi ing functional sound absorber in spite of t fact that it is many times more efficient th existing materials . . . There is little hope f improvement in efficiency of convention sound materials because the difference b tween theoretically possible values and t actual results are small. On the other han the functional sound absorber is a new a revolutionary idea in the field of sound abso tion and the possibilities of improvement efficiency beyond that already obtained . are tremendous."

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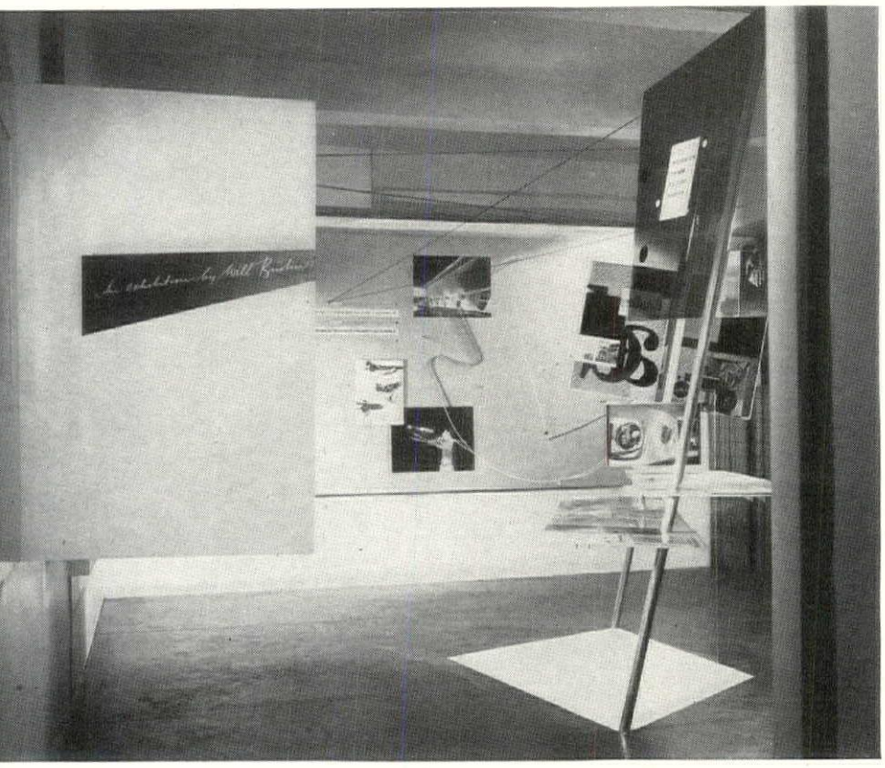
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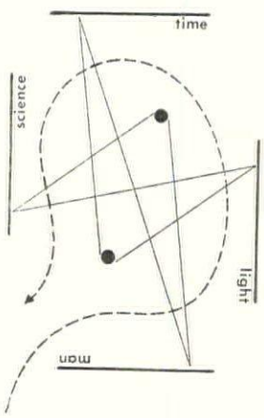


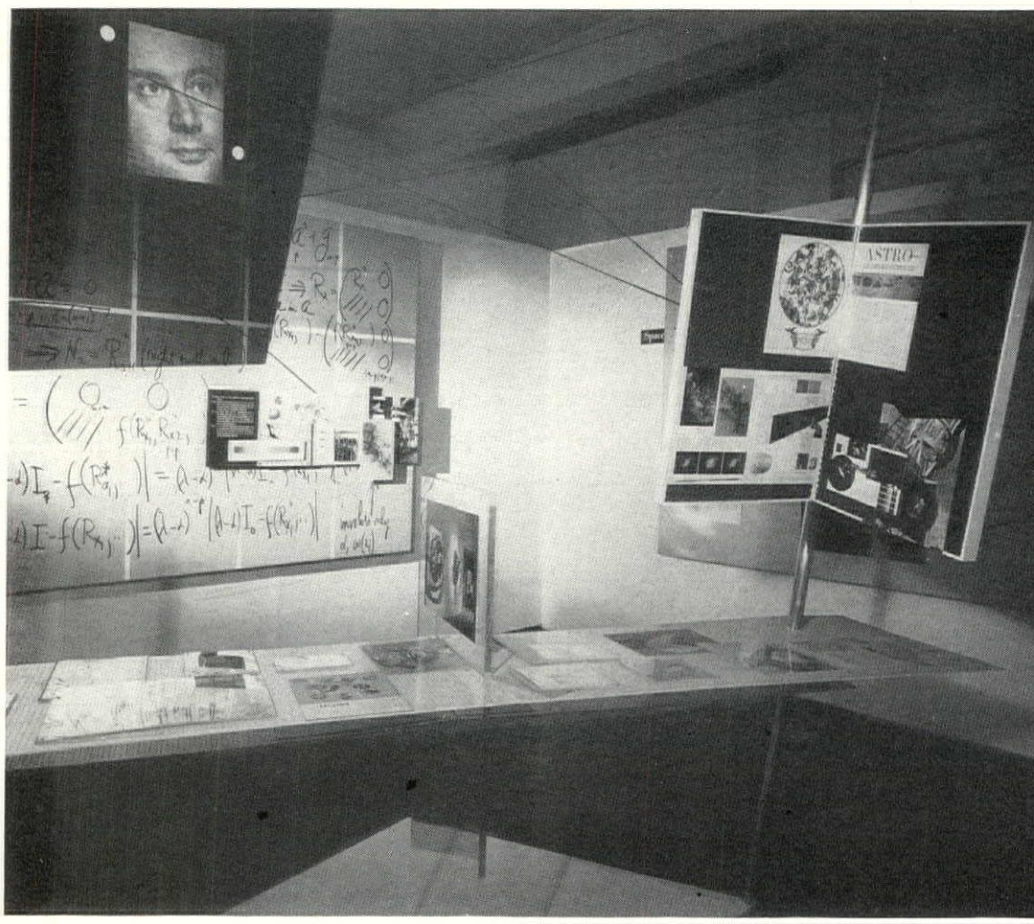
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THE DESIGNER STANDS AT THE CENTER

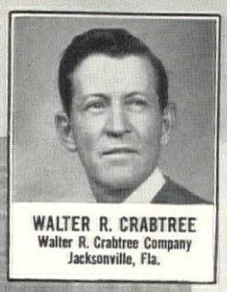
"Four basic realities seem to influence visual reactions. The are: the reality of man, as measure and measurer; the reali of light, color, texture; the reality of space, motion, time; t reality of science. The designer stands between these concep at the center, because of his unique role as communicat link, interpreter, and inspirer." So says Will Burtin, one the top U. S. masters of the visual reaction as it can be evok within the limits of type and the color plate. FORUM reade may remember Will Burtin as the contributor of the 19 Design Decade cover; this was one of his first works in t country. Since that time, Burtin has turned in a series impressive performances including the now-famous gunne manuals for the U. S. Army and his present post as art direct of *Fortune* magazine. The current exhibition of his work the A-D Gallery in New York (soon to be a traveling sho should be of interest to designers in all categories for its int ligent exposition of how one man has developed the discipli of his art. In Burtin's work, the visual purpose, the media the designer's disposal. the creative "instinct" of the desig are all weighted components of the job; the happy integ tion of these is the designer's discipline.





Ezra Stoller: Pictorial Servi





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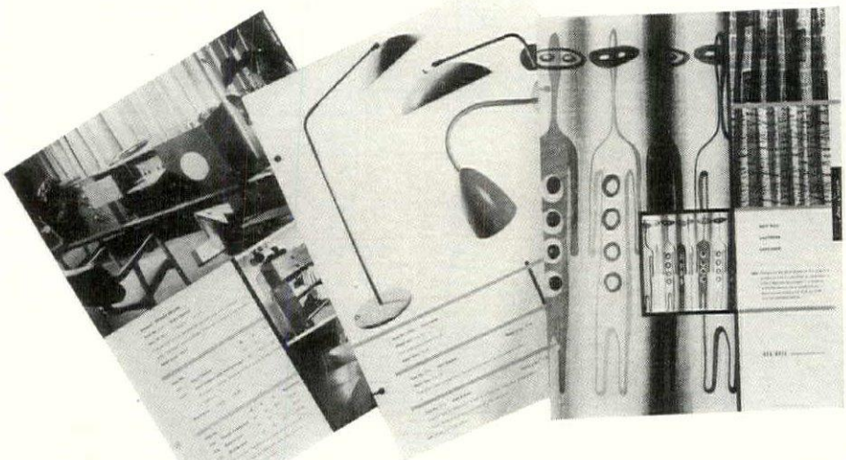
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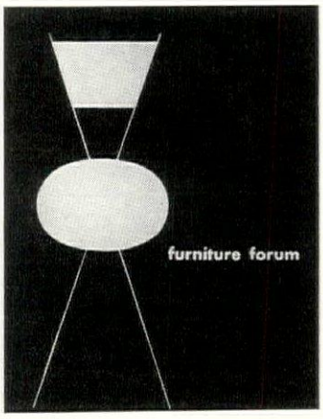
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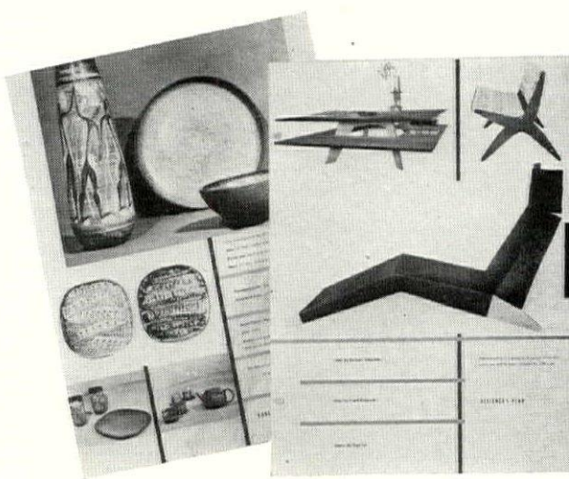




FURNITURE FORUM. Vol. 1, No. 1. Published quarterly Hollis Christensen, 812 S. Robertson Blvd., Los Angeles 35, Ca 64 pp. Illus. 8½ x 10½. Domestic rates: $4.50 a year.

One of the most encouraging developments in contempora design is that there is now enough good modern furniture a accessories in mass production to merit a catalogue. For t is what this handsome loose-leaf book is and its editor a publisher, Hollis Christensen, expects to update it by quarte supplements. Covering furniture, lamps, fabrics and cerami the handbook gives sizes, finishes, prices, a retail direct and list of manufacturers.

The size of the furniture section is impressive evidence the variety of styles now available to the home furnisher w makes the same demands of equipment that he makes of modern house. Alongside the Aalto classics, now appear complete line developed by George Nelson and Charles Ea

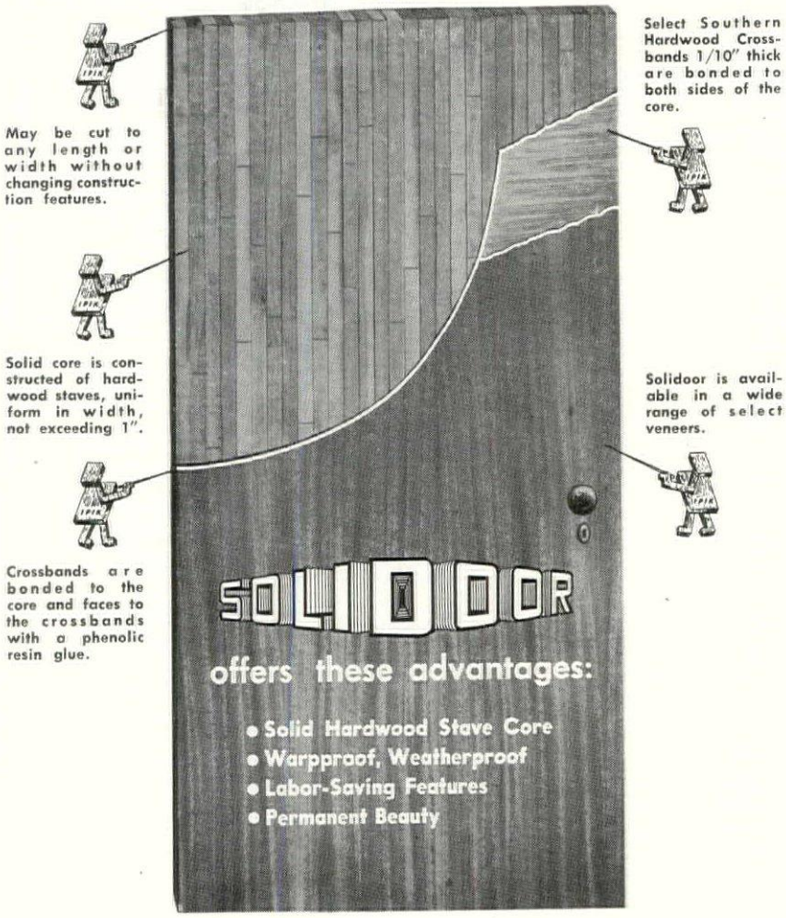


for Herman Miller and Robsjohn-Gibbings' suave new pie for Widdicomb (to name only a few of the newcomers). pioneer pieces of Knoll Associates (first good line to get i the department stores) hold their own against the fresh additions: Eero Saarinen's wonderful foam rubber armch and Richard Stein's handsome mechanical daybed. The la section suggests that there is plenty of room in the fi Beside the well-known line by Kurt Versen, the work of two new designers shows up: Magnusson Grossman's alu num-cupped lamps hung from steel and brass tubes Walter Von Nessen's glass fiber-shaded floor and desk lam

Among the fabrics, the work of Ben Rose and Ruth Ad looks (in black and white photos) outstanding. Miss Ad opened her own workshop in Detroit in 1947 to handscr her abstract designs; by the next year, she had won American Institute of Decorators award.

The section allotted to experimental work and work students is particularly interesting. Since scant publicity merchandising effort is customarily given to this kind of w it is good to think that some of the promising student desi will get into the hands of architects and decorators wh interest may inspire commercial production.

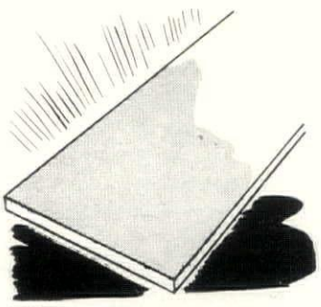
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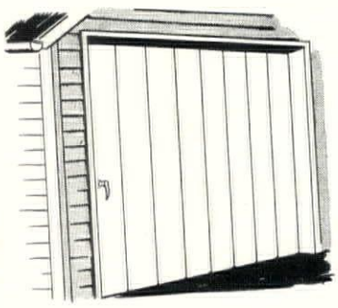
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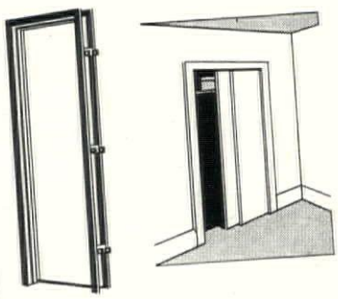
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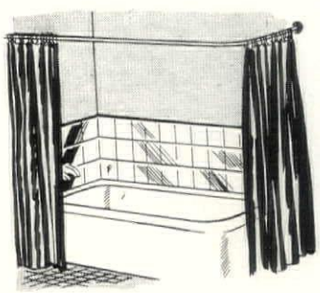
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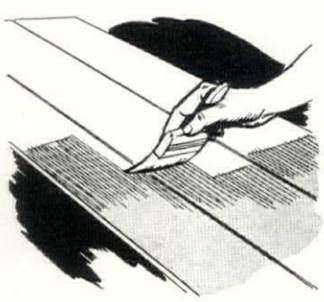
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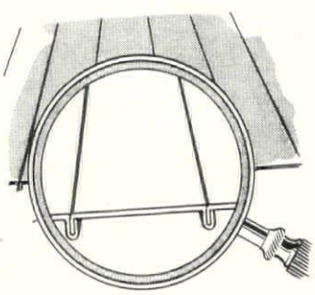
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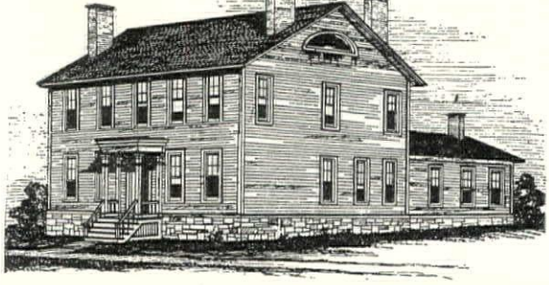
REVIEWS

MADE IN AMERICA. By John A. Kouwenhoven. Doubleday & Co., New York. 269 pp. Illus. Index. 8½ x 4½. $5.

Here is a book that may well stand eventually as tall a landmark in the evolution of the American consciousness as Emerson's challenge. Mr. Kouwenhoven, a Barnard professor who is also a staff member of *Harper's* magazine, has laid down a scholarly foundation for discussing a question with which thoughtful Americans have long been concerned: what is the relationship between American art and American life? And he has put the question in such a way as to transfer to the reader his own great confidence that the relationship is a vital one—that we are bound to develop finally the art forms that will make modern technological society a culture as rich as any that has preceded it. While his historical development of the question covers much of the ground familiar to a architect (Greenough, Sullivan, Roebling, etc.), it is the fi to set the architect's problem in perspective as part of t whole American problem in art. (To the credit of the A.I. it recognized the importance of Mr. Kouwenhoven's work 1941 when it joined with the *Atlantic Monthly* in awardi him a $1,000 prize for an essay, "Arts in America," his fi outline of the material expanded in this book.)

It is Mr. Kouwenhoven's happy thesis that American has strong and nourishing roots in a vernacular which l occasionally been threatened but never quite obliterated the academic tradition derived from Western Europe. T vernacular is our own American tradition: the folk art of t first technological society in the history of man. Unli Siegfried Gideon (*Mechanization Takes Command*), Kouwe hoven does not believe that the machine threatens to destr its creator. He says: "An astounding proportion of the to mechanical power which our civilization has produced owned and controlled by individual citizens . . . The pers who knows how to clean his own fuel-pump filter and adjust his ignition timing will be hard to convince that 't machine' is his master. Merely understanding a few of yo car's idiosyncrasies—the particular way to tease its worn-o windshield wiper into renewed activity, or the exact amou of pressure on the foot pedal which the brakes' adjustme requires—gives you a kind of secret intimacy with mechani power which deprives it of the irrational terrors with whi some people still like to scare themselves."

American intellectuals have often deplored the gap l tween art and life—the museum storehouses rearing th ponderous bulk out of the dreary vistas of the urban wild

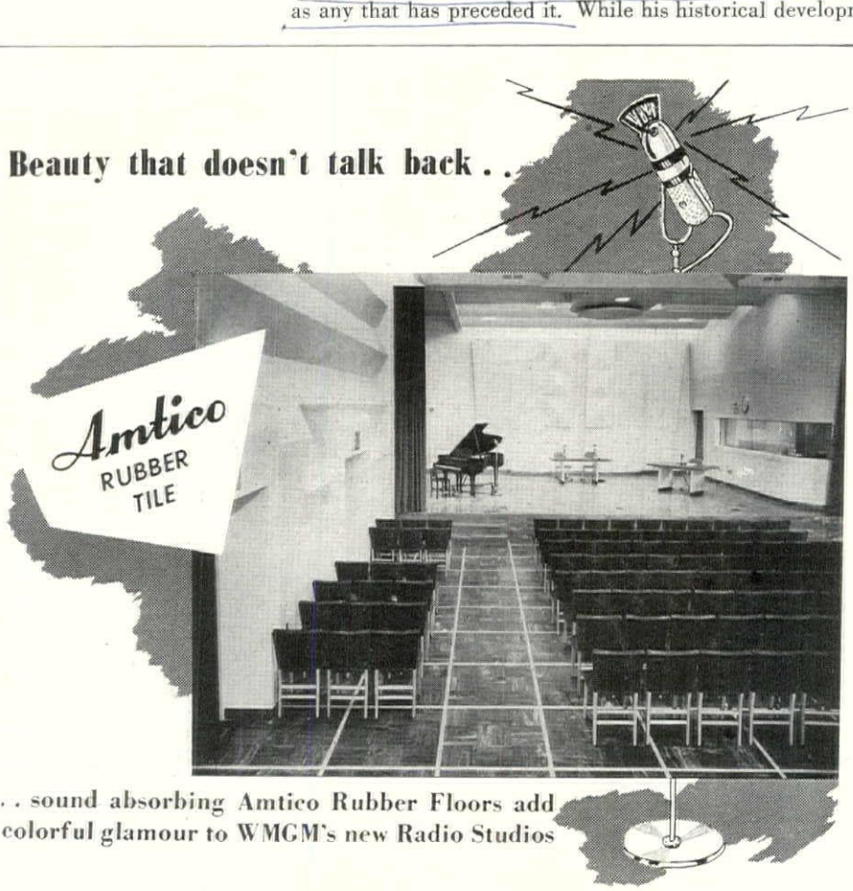


U. S. vernacular (above), embellished (below)



ness; the young venturers in the fine arts looking for them in a background composed of the gas station, the never-sile radio, the bingo game. But the gap, as Kouwenhoven is o of the few Americans to point out, is not between art and lif but between two civilizations: the agrarian class society th preceded the industrial revolution and the democratic socie based on power-driven machinery of our own time. If t

(Continued on page 13



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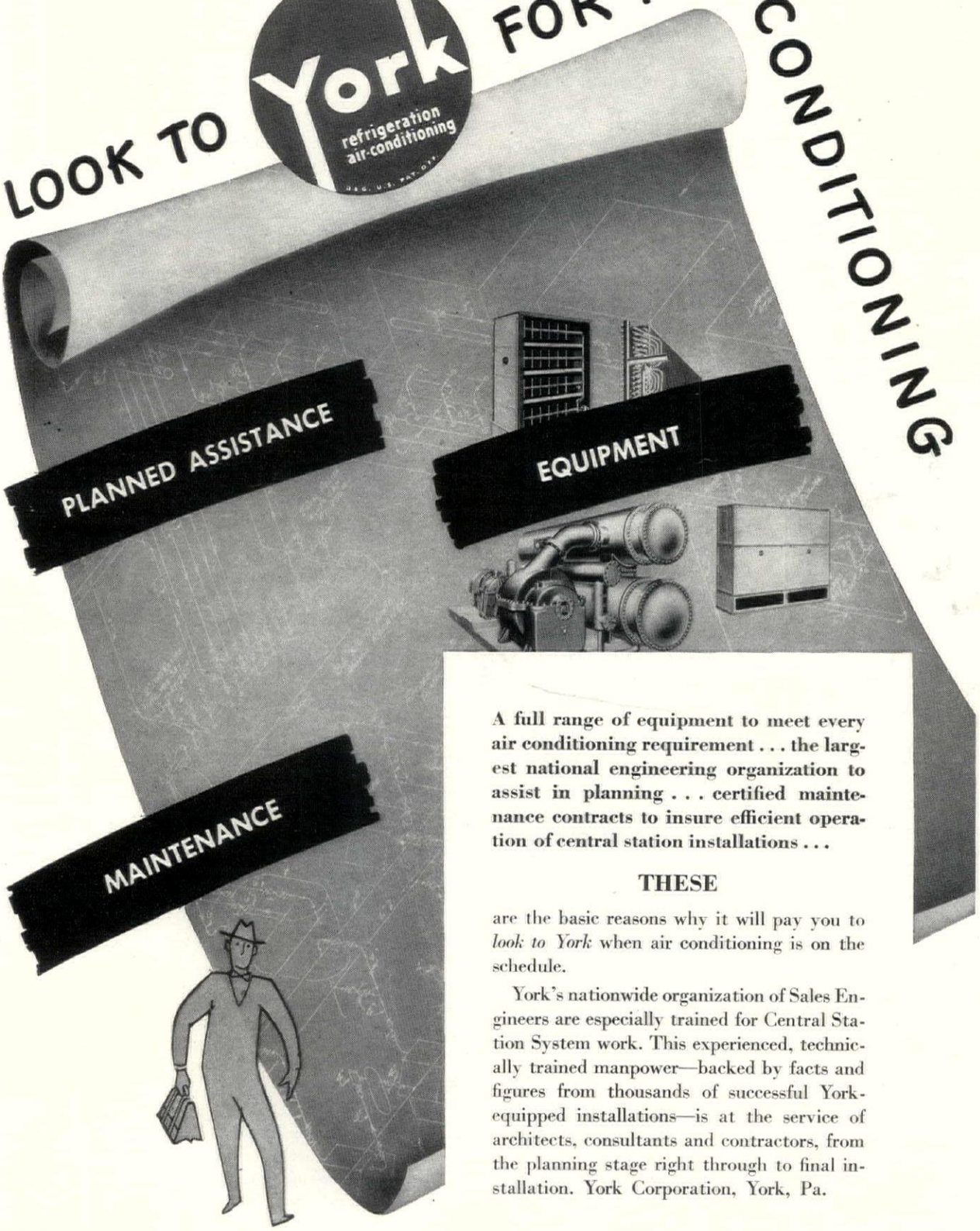
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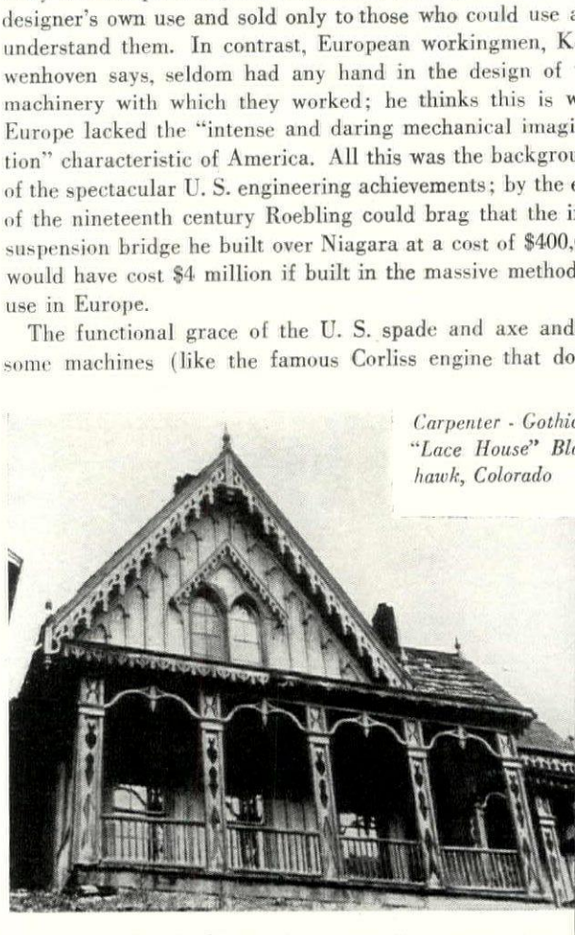
HEADQUARTERS FOR MECHANICAL COOLING SINCE 1885

transplanted riches of the museums have not made much of a dent on our national devotion to the juke box and the corner movie, it is probably because the art forms of a dead society can have little relevance to the radically new condition of modern man. To create the art that will be relevant, we shall have to get over our nostalgia for the great unified tradition of Western Europe and look with pride and assurance at our own roots.

The American vernacular has always been an art of tools. From its very beginning, the U. S. was not an agrarian, but a tool society: the Pennsylvania rifle won our Independence: American-developed rifles and revolvers won the Frontier: even before the Civil War, the steamboat, railroad and telegraph had tied the country together. Thus it is not surprising that early U. S. tools showed significant differences from their European counterparts. In 1828 James Fenimore Cooper s that American plows were more "graceful and convenie and American axes more admirable "for form, for neatn and precision of weight." By the time of the U. S. Centenn Exposition at Philadelphia, this opinion was confirmed by Europeans themselves. The British delegation found U. tools both more graceful and easier to handle than their ow the German delegation found objects of daily use, like grandfather clock, "regretably" free from ornamentation.

U. S. hand tools seem always to have been designed fr the point of view of the man who used them; their lightn and grace was the result of the designer's interest in reduci his own labor time. The first U. S. power-driven machi showed the same kind of difference from European mod They were improvised, not calculated, usually made for designer's own use and sold only to those who could use understand them. In contrast, European workingmen, K wenhoven says, seldom had any hand in the design of machinery with which they worked; he thinks this is w Europe lacked the "intense and daring mechanical imagi tion" characteristic of America. All this was the backgrou of the spectacular U. S. engineering achievements; by the of the nineteenth century Roebling could brag that the i suspension bridge he built over Niagara at a cost of $400, would have cost $4 million if built in the massive method use in Europe.

The functional grace of the U. S. spade and axe and some machines (like the famous Corliss engine that do

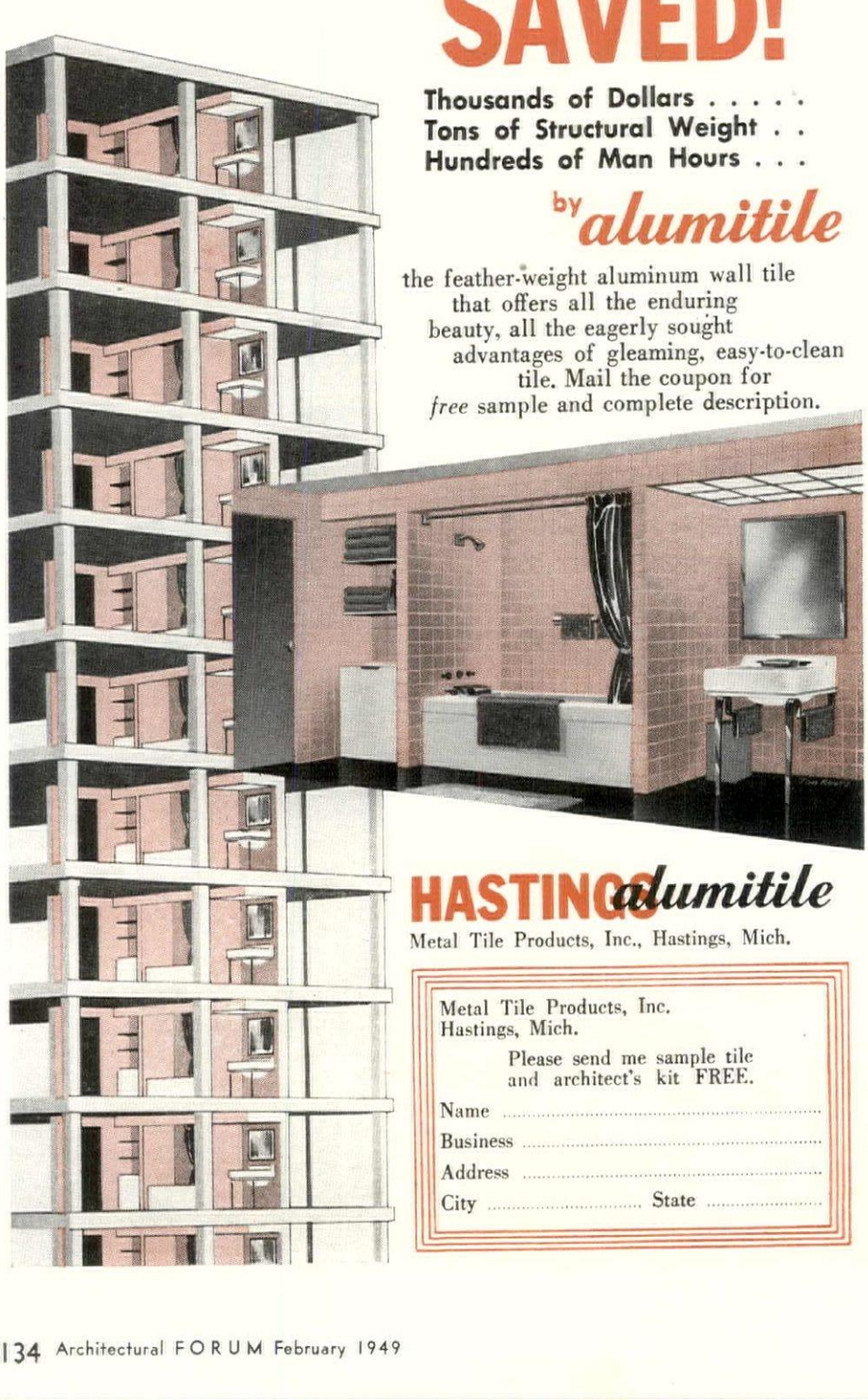


Carpenter - Gothi "Lace House" Bl hawk, Colorado

nated the Philadelphia exposition) may be news to those have looked at the old prints which show the heavy Got detailing of many early U. S. machines. Kouwenhoven has interesting explanation: For many years, the U. S. Pat Office required a small-scale working model of a mach instead of the drawings required today. Since theses mod were made of wood, the inventor frequently turned t cabinet-maker for execution of the model. The cabinet-mak working in the academic tradition that guided his own pr uct, embellished the basic pattern with scrollwork, car legs, fluted columns, etc.

This embellishment does not deny the basic functional of American work; it was simply part of the counteract influence of the academic tradition which, in confused inaccurate copying, showed up in all levels of American The Philadelphia exposition, for example, seems to have b as much of a set-back to the development of American fo

(Continued on page



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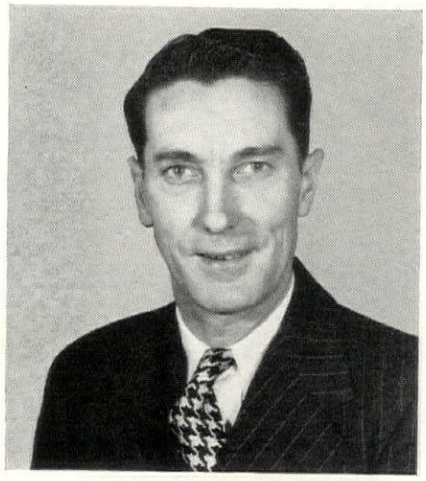
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Mr. Lawrence Graves, part-owner of buildings illustrated.*

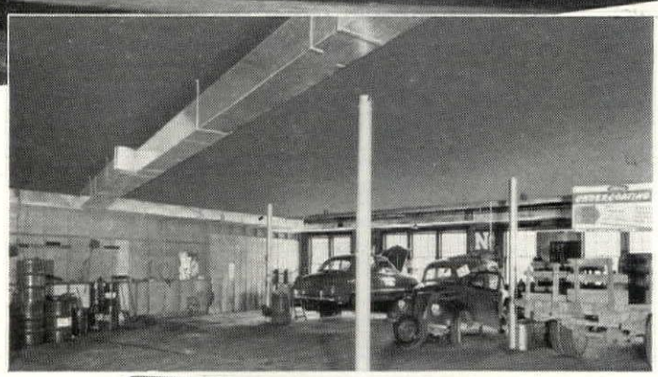
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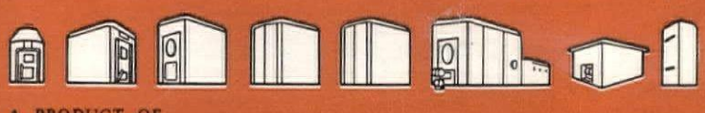
Needless to say, I am now a warm air enthusiast."

* Statement of Mr. Lawrence Graves on file with Jackson & Church Co.

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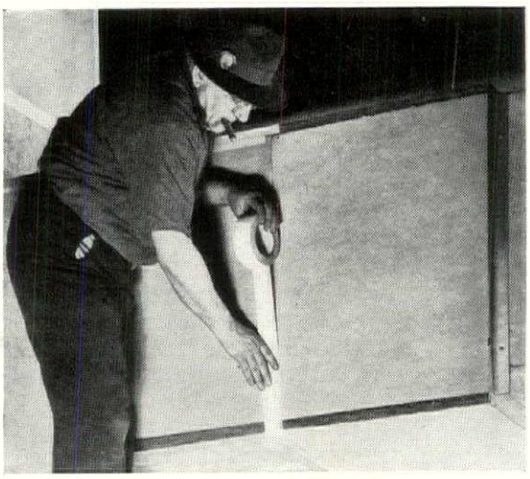


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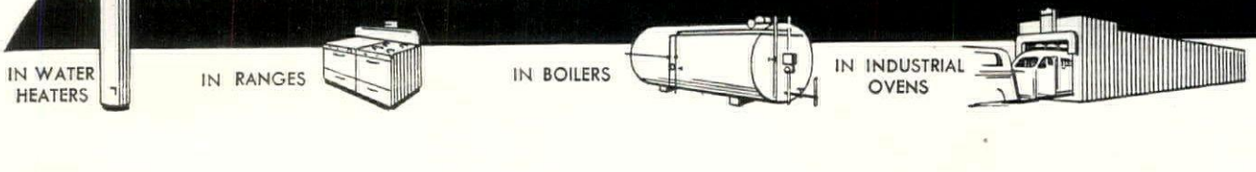
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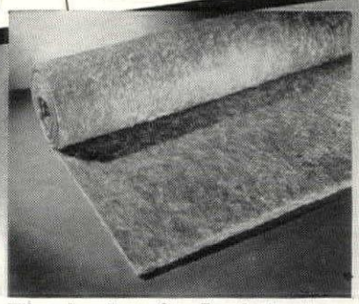
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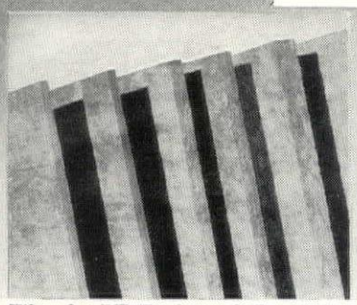
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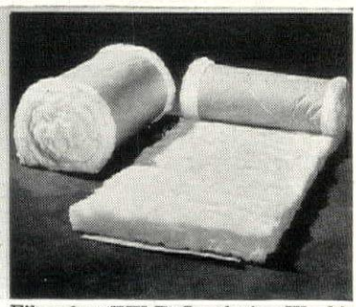
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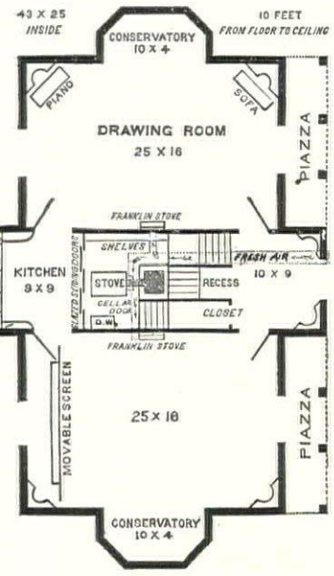


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The Open Plan in 1869
(Beecher-Stowe)

in art and product design as the Chicago fair of 1898 was to be to the development of American architecture. European exhibits of fine and decorative art at Philadelphia had enormous influence. After the exposition, "There was a great deal of talk about 'applied art' and 'art' was applied, with a vengeance—to everything the culture collectors could get their hands on . . . Two years after the Centennial the sale of jig-saw blades had leaped from a few thousand a year to about five hundred thousand a month."

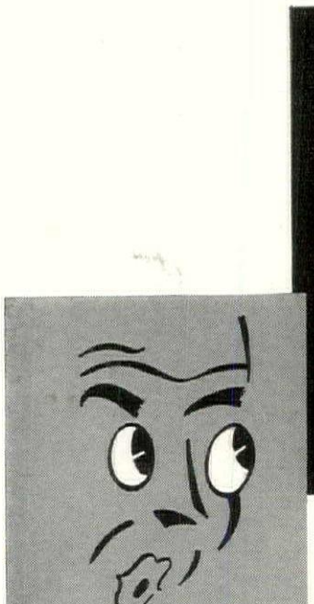
But, underneath and not much influenced by the surface ornamentation, the sturdy vernacular roots of America flourished. This was especially marked in Building; it was our own vernacular tradition that flowered in Sullivan and Wright, in Albert Kahn, in the excellent residential work of the whole group of modern architects. The American invention of balloon frame construction, Kouwenhoven thinks, wa an important element in the development of our own strikin ly democratic architectural tradition. Lighter and cheap than the heavy timber method of European wood constructio it was sometimes "appallingly ugly"—but it meant that a most everybody who wanted one could build a house and th few who wanted to leave for the Frontier had any irreplac able stake. The American house plan, long distinguished f openness and flexibility, has similarly democratic root Kouwenhoven documents its relation to the suffragist mov ment. In 1869, Catherine Beecher and Harriet Beecher Stov published the *American Woman's Home* and provided hou plans which, in their central mechanical core, kitchen layou and outer ring of flexible, many-windowed living space, sho a surprising anticipation of modern work (see cut).

If the mainstream of contemporary American architectu represents the triumph of the vernacular, what about th other American arts? It will surprise nobody that Kouwe hoven finds jazz a "climactic achievement of the vernacul tradition in America." But his explanation of why he thin so greatly illuminates the whole question of what function a must perform to be meaningful in modern life. Jazz, he say "is an art form which within its own well-recognized limi comes closer than any other we have devised to reconcilin the conflict which Emerson long ago recognized as the fund mental problem in modern civilization—the conflict betwe the claims of the individual and of the group. Everybody a first-class jazz band seems to be—and has all the satisfa tion of feeling that he is—going his own way, uninhibited a prescribed musical pattern, and at the same time all a performing in a dazzlingly precise creative unison. The thi that holds them together is the very thing they are all so bu flouting: the fundamental four-four beat. In this one artist form, if nowhere else, Americans have found a way to gi expression to the Emersonian ideal of a union which is pe fect only 'when all the uniters are isolated.'"

The conflict which jazz sets and resolves is far more relat to the demands of our industrial society than to the method traditional art. Kouwenhoven finds a parallel in Federi Winslow Taylor's early recognition that the development industry depends on our ability to function not as individu ists, but as a group. Taylor, remembered as the man w introduced time and motion studies in factory manageme said in 1911: "The time is coming when all great things w be done by that type of cooperation in which each man pe forms the function for which he is best suited, each man pr serves his individuality and is supreme in his particul function, and . . . yet is controlled by and must work ha moniously with many other men."

Lest anybody conclude that Kouwenhoven's theory of t vernacular smacks of the narrow nationalism, that has occ sionally marred American thinking, let this be clear: "T important thing about the vernacular is that it possesses inh ent qualities of vitality and adaptability, of organic as oppos to static form, of energy rather than repose, that are partic larly appropriate to the civilization which, during the br life span of the U. S., has transformed the world." Everybo concerned with the design of American building may w consider this book as required reading. For, in the autho words, "As a nation we have been hesitant and apologe about whatever has been made in America in the vernacu tradition. Perhaps the time has come when more of us a ready to accept the challenge offered to the creative imagi tion by the techniques and forms which first arose among o own people in our own land."—L. C.

(Continued on page 1



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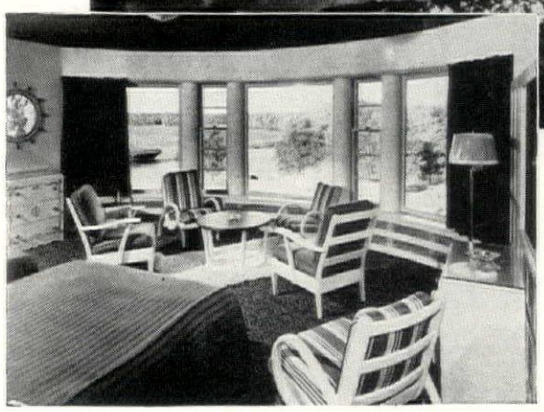
The 1949 edition of "Simplified Specifications," Lockwood's manual that streamlines specification writing, is now available. Look for it in SWEET'S; or write for your free copy.

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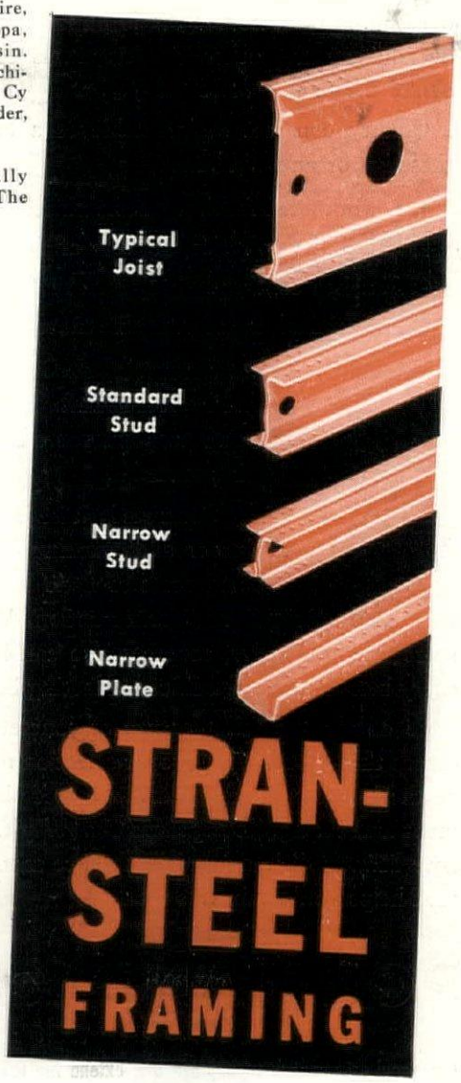


Above: a strikingly handsome structure is The Northernaire, country club hotel and spa, at Three Lakes, Wisconsin. Stanley W. Howe, A.I.A., Architect, Monroe, Wisconsin; Cy Williams, designer and builder, Three Lakes, Wisconsin.

Left: one of the beautifully appointed bedrooms in The Northernaire.

The famous resort hotel and spa, The Northernaire, at Three Lakes, Wisconsin has steel-framed floors and walls. "Because," owner Carl Marty, Jr. says, "low maintenance cost was essential and the lasting quality of Stran-Steel floor joists and studs was considered more important than initial cost. Stran-Steel framing was the recommendation of our designer and builder, and was immediately available. No condensation, plaster cracking or sound-conduction have developed. The building is most satisfactory in every respect."

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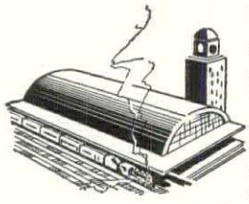
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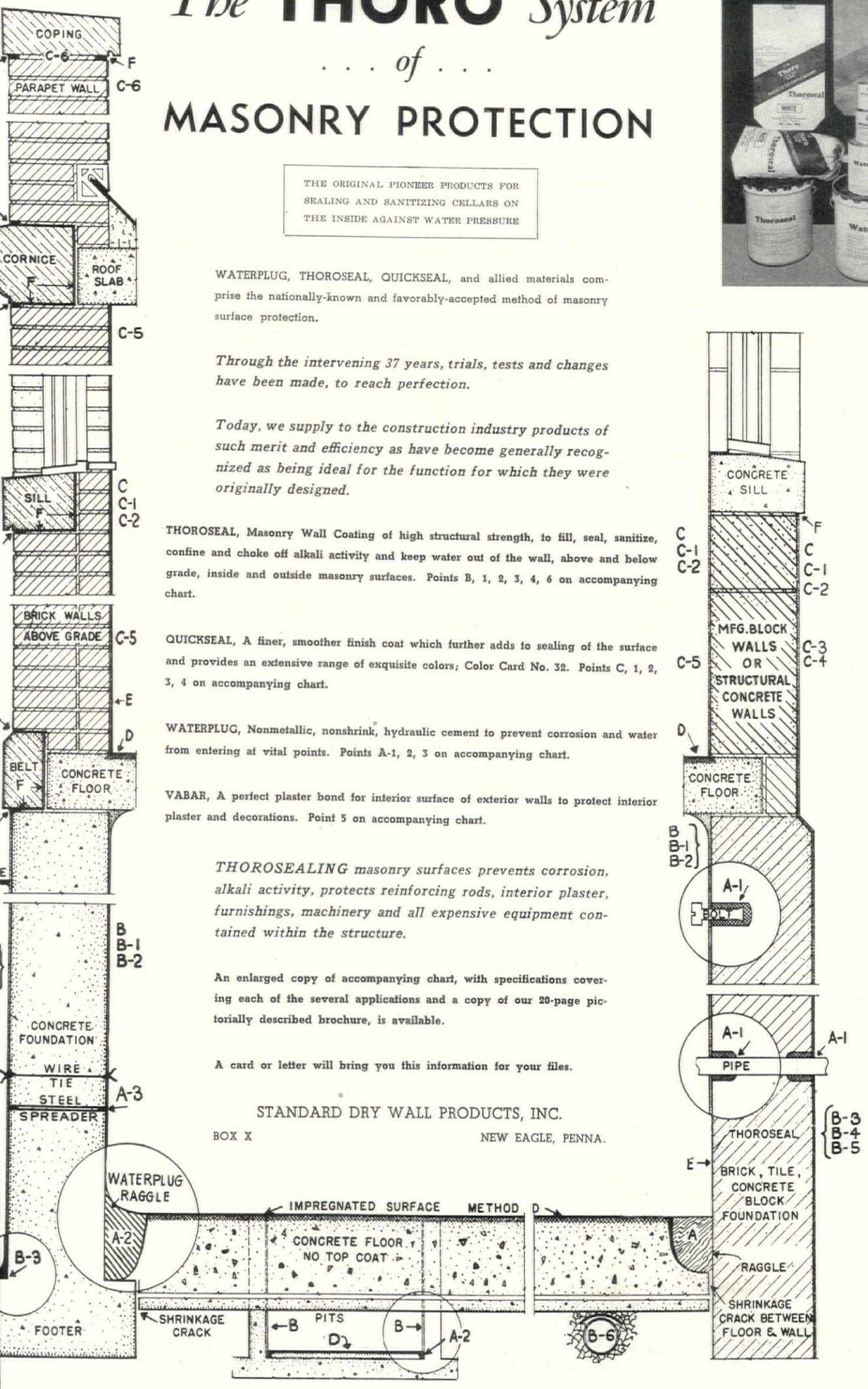
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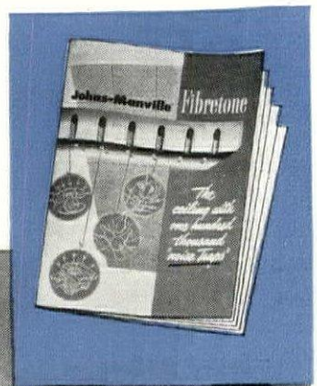
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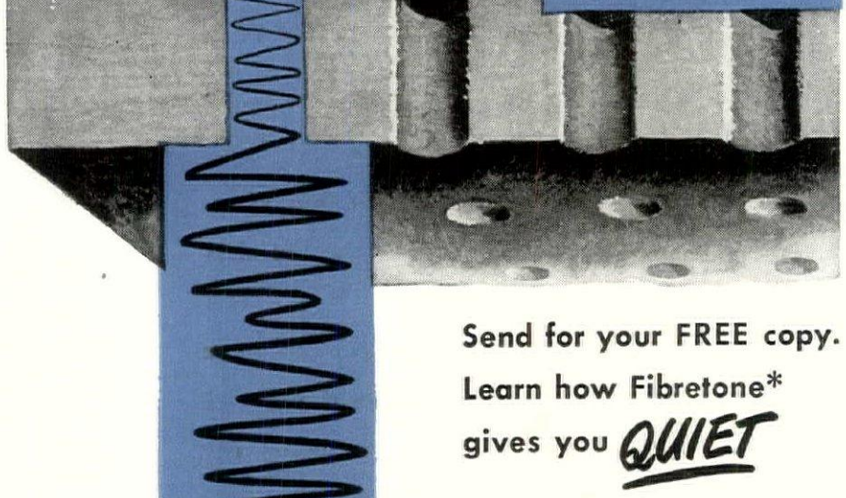
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PLANNING THE MODERN CITY. By Harold McLean Lewis
John Wiley & Sons, Inc., New York. 2 Vols. $12.

This book, unfortunately, does little but further confuse thought in that already confused realm of public endeavor —city planning. It demands critical attention for two reasons: first, the author's long experience in the planning field. Harold Lewis (son of Nelson Lewis, author of *The Planning of the Modern City*, on which this work is based) has for 21 years held executive posts on the Regional Planning Board of New York City, and has been consultant for the U. N. site and for city plans throughout the country. Second is the fact that the book is intended as a text—there are review questions and references at the end of each chapter. Such a combination of headquarters' authority and student inexperience implies that the book will have an influence on a new crop of planning engineers—an influence that in any broad sense can only be to the bad.

At its best, *Planning the Modern City* gives an encyclopedic account of a number of vital problems in planning—transportation, transit, land use and control, housing, blighted areas, municipal financing, etc. Complicated and key questions of urban development, such as land-versus-improvement taxation and benefits of excess land condemnation are given painstaking treatment. However, in spite of the fact that Lewis deplores the engineer "with eyes too closely fixed on the drawing board," his long-range attitude continually proclaims him just that. Even sound conclusions are reached by such dubious routes that they lose conviction. Consider this argument for good road planning—"Approaches to a city may be shabby and uninteresting and the only available roads leading to neighboring towns may be tortuous in their course and may pass through the meanest parts of both, giving the traveler a very unfavorable impression. The environs of a city should therefore be studied in connection and in relation to the plan of the city itself."

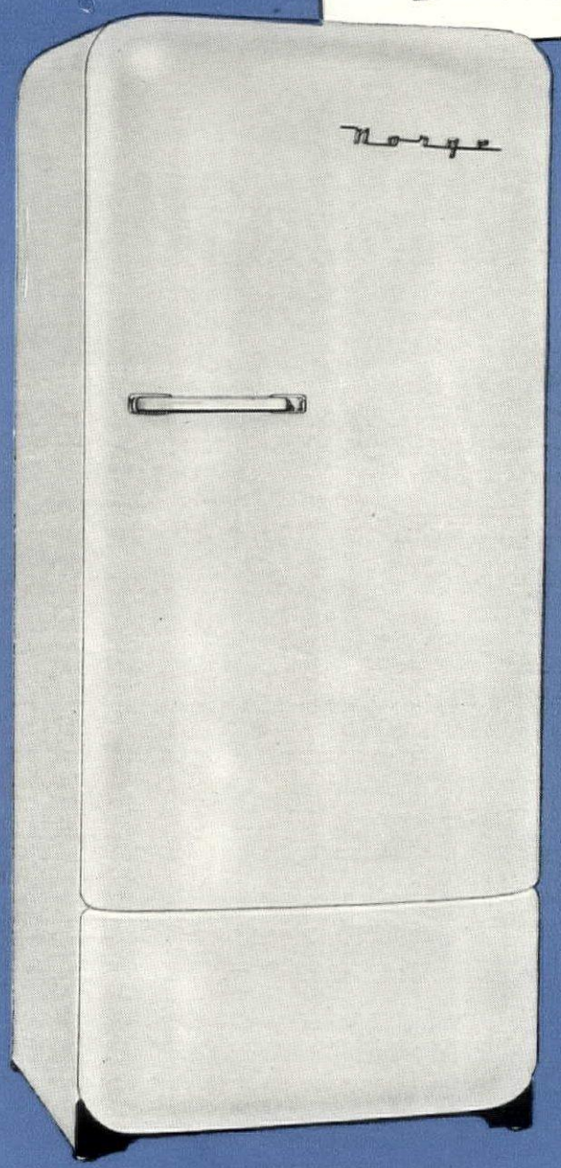
Confusion descends to the very root of the book. Lewis states his thesis "frankly": "the fundamental problems of city planning are, and by their very nature must be, engineering problems." This challenging premise draws in its horns a few pages on by an amazing shuffle of terms—"Problems of housing, the provision of recreation and amusement . . . public utilities . . . markets . . . collection and disposal of wastes . . . public health, care of paupers, criminals, and the insane" are not, it appears what *he* means by planning; they are "administrative" problems. Engineering considers "the *more fundamental problems* of so planning a city that the necessary buildings or the space required for them may be provided without the destruction of improvements already made or a recasting of the plan." In his pride of profession Mr. Lewis could hardly do more to cast suspicion on the very valuable contributions his profession has to make.

One cannot help wishing that this book had been what every true city plan must be—a collaboration by men of complementary talents; that its mass of information had been ordered by the discipline and breadth shown, for example, by architect-planner Henry Churchill in his book—*The City is the People*. A sentence from Churchill illuminates the failure of Lewis—"Until the planners know . . . what the purpose of a city is, what those who live in it (not just those who 'own' it) want it to be, planning will continue to be merely the means of livelihood of planners."

Lewis does not even give his student-readers a peephole into this broader view—nowhere among his appendices is there a single reference to the books of Churchill or Goodman or such to stimulating planning theorists as Geddes, Le Corbusier or Wright.—S. K.

(Continued on page 146)

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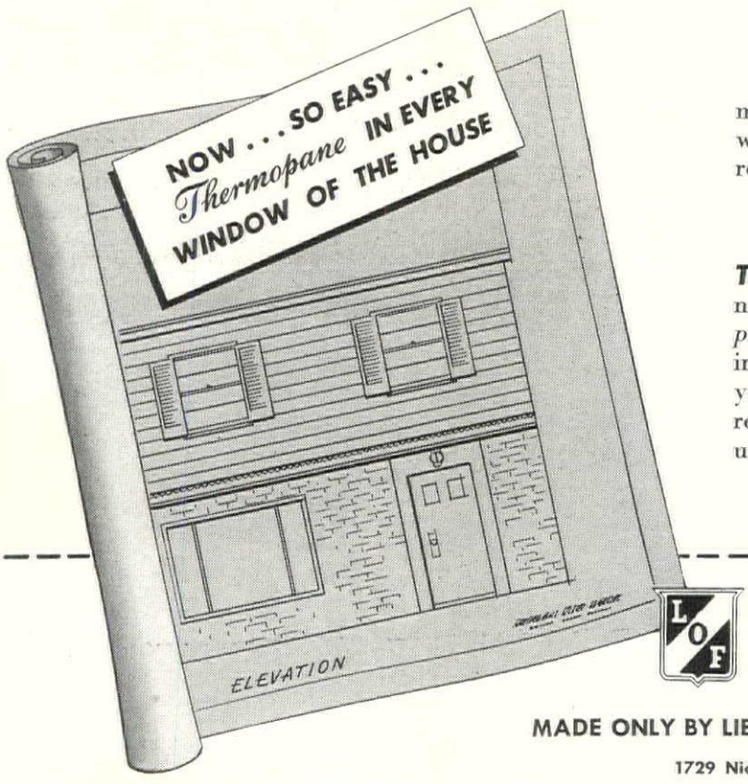
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HOUSING AND EMPLOYMENT. Prepared by R. I. Downing, Economic Section, and published by the International Labor Office, Geneva. 147 pp. 6½ x 9½. Tables and index. 75 cents.

With the U. S. apparently about to embark on a public housing program amounting to as much as one million units a year this study, done from the calm, non-political perspective of an international view, has more than usual interest for anybody concerned with the future of this country's housebuilding industry. Much of the confusion, the often contradictory and overlapping steps so far taken by the federal government can be laid to our failure to come to an agreement on a national housing policy that will best serve the welfare of the majority of our citizens. The point of view of organized housebuilders and realtors has been so adequately vocalized and dramatized as to need no restatement here. But aside from these special groups (whose opinion on the subject is less their own than that of association functionaries who see in the dog-eared public housing fight a prime reason for being), there is scarcely any section of American public opinion which denies that present circumstances demand some public effort and expenditure in the field of housing. The bogey of "socialization" which the realtors have raised over the housing question has certainly not stopped government intervention, but it has probably had a lot to do with preventing clear-cut thinking on what are feasible housing objectives and what national housing policy must be to achieve them.

For whether you believe that government responsibility in housing should be limited to fiscal policy or extended to the direct building called for by the current administration bill the unarguable fact is that since 1933 the government has been vigorously intervening in the "natural" operation of the house market and, by all present signs, will continue to do so. The most pressing job—both for the industry and the public—would seem to be neither impassioned opposition nor blind devotion to "public housing" but the laborious drumming out of a program that can coordinate both private and public action to achieve what we all want: the stabilization of house building activity at a level high enough to provide adequate housing for all of us.

If the problem of how to achieve a measure of stability without an equal measure of rigidity can be said to the prime question confronting modern capitalist economy, then no industry presents this problem in a more urgent form than the housebuilding industry. This is not only because the house has been conspicuously neglected by the technological revolution. It is also because of a kind of instability that seems implicit in the demand for houses—as opposed to the demand for any other industrial product. Says the ILO study: "If a country uses 100 million lbs. of flour in a year and the total demand for flour remains unchanged, there will be a demand for the production of the same amount of flour in following years also . . . But if at any one time the country has a million houses, not only are the houses themselves available in following years, so that they do not need to be replaced by new production; but the small amount of repairs, alterations and replacements required to maintain the house can fluctuate substantially from year to year. Houses are extremely durable assets. This removes from the demand for building activity the basic element of stability which underlies the demand for consumer goods."

If the durability of housing—and its market's peculiar capacity for sharp expansion and contraction—are the main reasons for the striking instability of housebuilding production, the fumbling attempts of the industry to protect itself

(Continued on page 150)


Slice building costs with the New BILT-WELL Line
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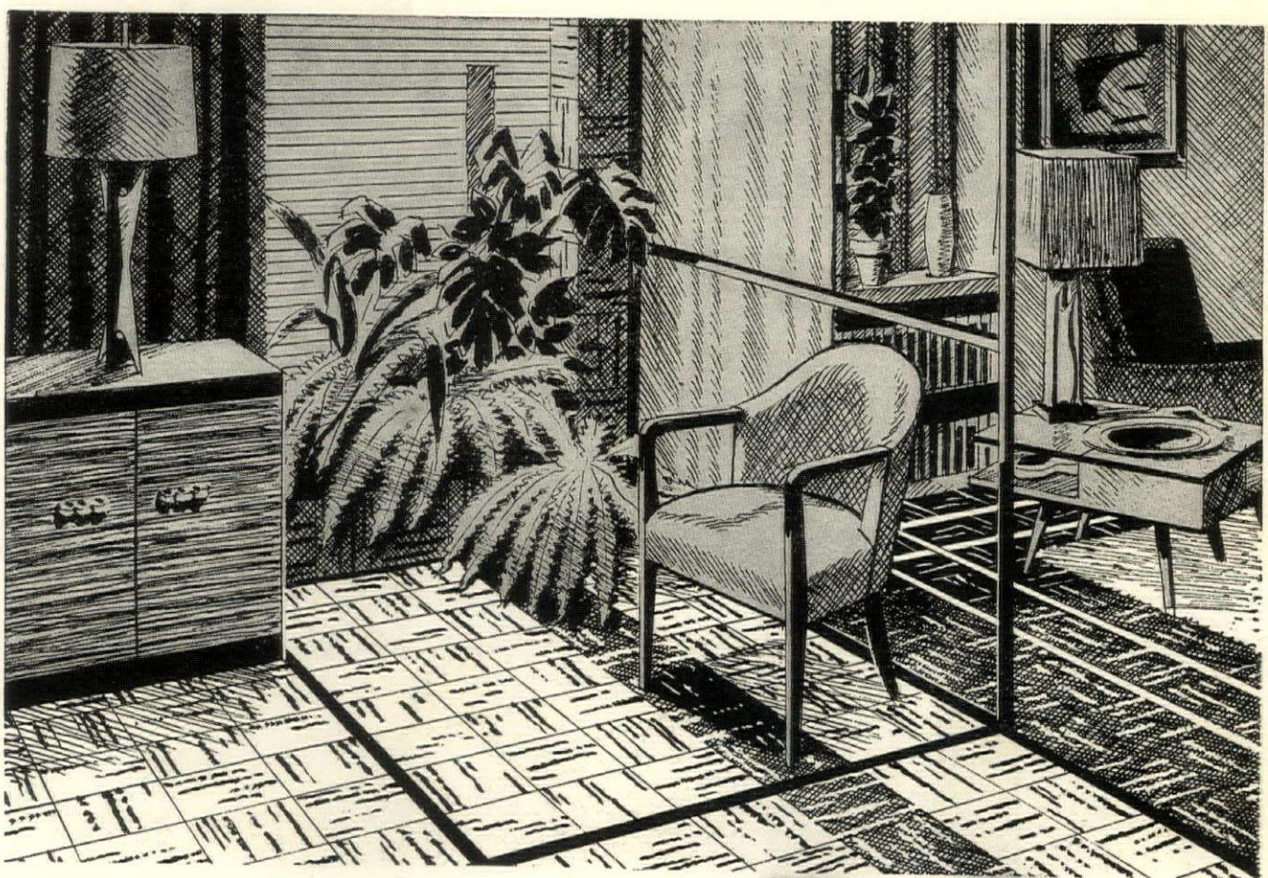
new direction in housing

new direction in housing

new direction in housing

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- **CLEANABILITY** achieves a new importance with the new, improved formulation of Kentile, especially in kitchens and foyers.
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What every Architect should know about

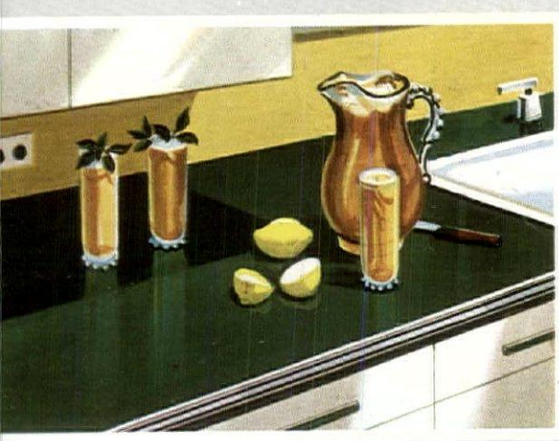
MICARTA



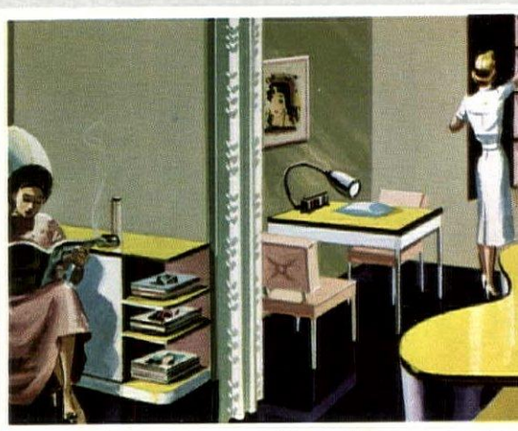
Micarta table tops offer a tough, impervious surface that makes possible "hospital cleanliness." Sanitation is quite as important in soda fountains and public eating places as in hospital operating rooms, where Micarta is extensively used.



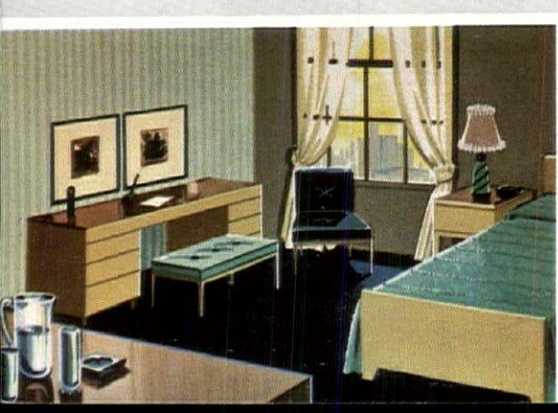
Micartabord; 5/32" thick, provides good looking, sturdy, scuff-resistant, washable walls for corridors. Micarta is also widely used for elevator cars in public buildings, apartments and institutions.



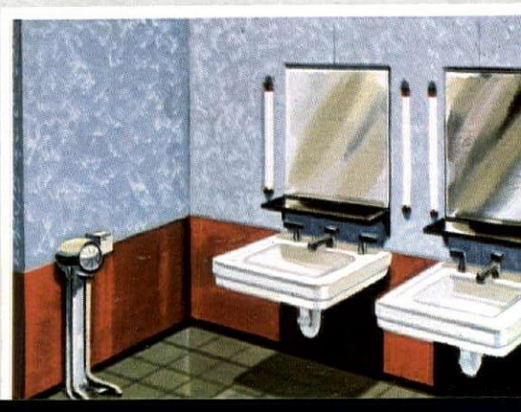
Micarta's well known resistance to all types of food products, and to detergents and household cleansers, makes this beautiful plastic popular for kitchen sinks, counters and all work surfaces.



For beauty shops, barber shops and retail stores of many kinds, Micarta provides bright, colorful work surfaces, walls, counters, and tops for tables and other furniture.



More and more, Micarta is being used for furniture tops in homes, hotels, and institutions. Micarta Truwood, made with genuine wood veneers, is widely used for such applications. Incidentally, Micarta can be worked by hand tools. It can be sawed, trimmed, planed and drilled.



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Micarta is ideal for bar tops and fronts as well as for fountain tops. It is not marred when cigarettes are snuffed out against it.

If you are uncertain, if you don't know what Micarta will do . . .

Here's a challenging offer:

Try to chip it!

Use silverware, cooking implements, the ordinary tools that would be used in a busy kitchen or pantry. *Just try!*

Try to dent it!

Bang heavy glasses, ash trays, cups, or even cooking pots and pans on it. *Just try!*

Try to stain it!

Spill alcohol on it, boiling water, nail polish, polish remover, even hydrogen peroxide up to 8 hours. *Just try!*

Try to score it!

Gouge it with the edge of a half dollar. You can, of course, scratch it with the point of a sharp steel penknife, but as for anything else, *just try!*

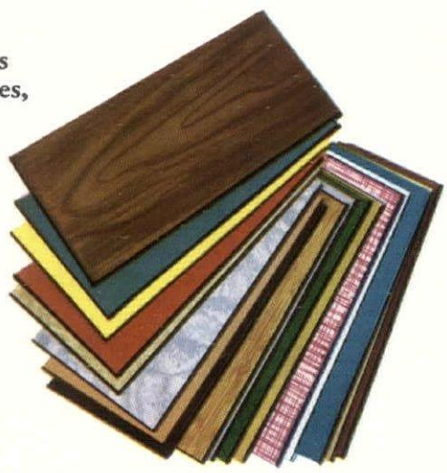
Try to spoil it!

Use it as an ash tray. Snuff out cigarettes against it. Walk on it. Pour boiling water on it. Actually *boil* it in water. Just *try* to spoil it.

ICARTA is a remarkably tough and strikingly handsome plastic laminate, available in 32 colors d finishes. It is widely used in large and small homes, res, shops, public buildings and institutions.

carta requires virtually no maintenance. It is not ected by boiling water, alcohol, detergents, house- ld cleansers, dilute acids, condiments, and barber d beauty shop preparations.

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The Architectural FORUM

Magazine of Building

Division of TIME, Inc., 350 5th Avenue, New York I, N.Y.

Let VINYLITE Brand Plastics Take the Floor!



PHOTO OF "FLEXACHROME" COURTESY OF TILE-TEX CO., INC.

YES, let VINYLITE Brand Plastics present their case as the new wonder material for floor coverings—and you be the judge. In brief:

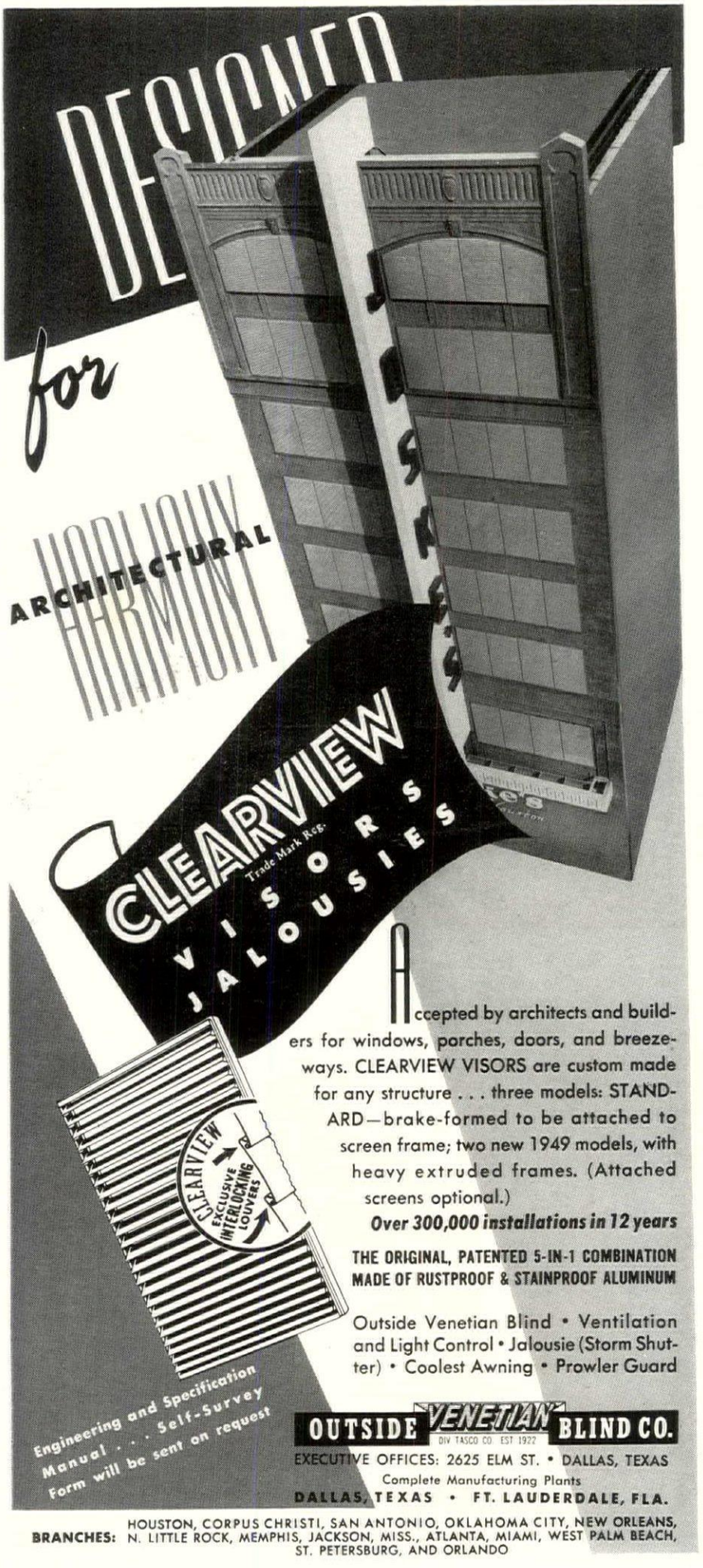
- ★ They have clearer colors—which can be lighter in tone than ever before in resilient flooring.
- ★ They're highly resistant to soaps, cleansers, grease, oil, and to acid and alkali solutions.
- ★ They're resilient—yet outwear other types of floor coverings.
- ★ They're flexible, conforming to uneven floor surfaces and absorbing normal play of wood floors without cracking.
- ★ They can be safely laid on concrete floors in direct contact with the ground.
- ★ They display greater luster when waxed than any other resilient floor covering, yet wax is not necessary because the surface is non-porous and dirt does not penetrate.
- ★ They come in an almost infinite variety of stable colors.
- ★ They provide floor tiles and continuous flooring of utmost wearability and ease of maintenance.

We submit that the case for VINYLITE Brand Plastics rests on a foundation of facts that cannot be matched by any other floor-covering materials. It explains why more and more manufacturers are turning to them, and why more and more architects are recommending them for public buildings and private homes. We'll gladly send you a list of suppliers of floor coverings made with VINYLITE Brand Plastics. Write Dept. ET-14.

Vinylite BRAND **PLASTICS**

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against these fluctuations have succeeded merely in exaggerat ing them. As every building man knows, labor's notorious restrictive practices like material producers' understandabl reluctance to gamble too heavily on boomtime expansion ar based on the feeling that there is only a limited amount o work to be done and that it had better be made to last a long as possible. Yet both these policies are self-defeating they help to push the cost of building to the inevitable poin of market collapse.

Labor's iron grip on the housebuilding industry is als responsible for its relatively poor performance — popula opinion to the contrary—as a job-maker in time of depression ILO says, "In the U. S., expenditure on construction gives ris to less direct and indirect employment than would simila expenditures on the products of many other industries," an uses this table to prove the point:

DIRECT AND INDIRECT EMPLOYMENT ARISING FRO VARIOUS BRANCHES OF PRODUCTION IN THE UNITED STATES, 1939

(In terms of number of persons employed per one million dollars worth of final demand for the output of the respective industries)

	Final demand of one million dollars' worth of						
Nature of Employment	Agriculture and foods	Minerals	Metal fabricating	Fuel and power	Textiles and leather	Railroad transportation	Construction
Direct	724	160	246	178	356	243	174
Indirect ..	415	406	260	340	414	246	274
Total ...	1,139	566	506	518	770	489	448

* Quarterly Journal of Economics, Feb. 1944, p. 312.

But spread-the-work practices are not solely to blame fo limiting labor's output. Said R. Harold Denton (*Towar More Housing*): "Both management and labor are responsibl for the obsolete management methods which persist in th building industry . . . On the ordinary building job, it ha been estimated that more than 25 per cent of the averag craftsman's time is spent in making decisions as to his nex move. Each operation offers a new problem to be solved. Yet management's failures, too, can be traced right back t that basic dilemma: instability of production. ILO remind that developments toward large-scale methods have been slo "because of the extreme instability of output which mak very risky the incurring of heavy overhead commitments."

The ILO report does not attempt to outline some magi formula for the kind of government housing policy that ca best assist private enterprise in self-stabilization. It does poi out some of the specifics into which the big question of stabi ized output breaks down and ably states the case for gover ment action related to, rather than oblivious of, them. Fe in this country will agree with these international researcher matter-of-fact suggestion that licensing housebuilders f yearly volume would be a good way to step on an unhealth boom. But most will probably think, as the ILO men do, th some kind of public action will be needed to deal with suc elements of stability as starting slum clearance at cyclic lows or assisting skilled building workers to transfer to oth industries at times when contraction of housebuilding is calle for. On this last point the ILO study says: "The more th production of houses can be made to depend on mechanizati and factory processes, the less specialized will be the lab required. If there is substantial progress made in this fiel the suitability of housing for executing counter-cyclical poli will make it a promising field for action of this kind." L.

(Continued on page 15



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In addition to the monolithic mortar slab completely around the structure, Steeltex veneer construction gives you positive protection against moisture penetration— greater fire protection and completely filled mortar joints. For better construction see our catalog in Sweet's or write for your copy of our catalog D.S. 132 to Dept. AF, Pittsburgh Steel Products Company, Grant Building, Pittsburgh 30, Pennsylvania.

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Use of *Energy in Color* Improves Production of Bottle Caps, Seals and Filling Machinery, Says Crown Cork & Seal Company's Chief Engineer

THESE DAYS . . . the alert manufacturer considers carefully every development—no matter how new or unusual—which will help him to build more and better goods at lower cost.

COLOR DYNAMICS is winning increasing approval among industrial executives in many fields because it has proved that its use improves both efficiency and well-being of workers.

Characteristic of the comments on this new painting method is the following letter from R. B. Hoffmeister, Chief Industrial Engineer of The Crown Cork & Seal Company of Baltimore, Maryland. This organization is one of the largest producers in the world of bottle crowns for beverages, metal milk bottle caps, closures for food, cosmetics and pharmaceuticals, and the equipment for filling these containers.

"We recently constructed a new one-story daylight building to house our Machinery Division," writes Mr. Hoffmeister.

"In this plant we have gone one hundred per cent for COLOR DYNAMICS. This color scheme has not only been applied to the machine section but has also been carried out in offices, engineering department, cafeteria, locker and wash rooms.

"No more drab gray or dark blue machines, no more glaring white walls—only restful colors. The workmen are proud of their surroundings and take great pains to keep their equipment and surroundings clean. We have also noted decided betterment in the quality and quantity of production, in morale and in safety. We are completely convinced that color has found its place in industry."

Why not test the value of Pittsburgh COLOR DYNAMICS in your plant? Try it on a machine or two. Better still, try it in one department. See the difference it makes in the efficiency, morale and safety of your employees. We'll be glad to make a COLOR DYNAMICS survey of your property on request without obligation on your part.

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LAVAX PBX ENAMEL—for woodwork, furniture or metal trim. Brushes out freely and easily to a smooth, satin finish.

FLORHIDE—for floor surfaces. Quick-drying, tough, can be scrubbed with soap solutions.

LAVAX MACHINERY ENAMEL—a durable finish impervious to grease, grime or dirt.

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PLANNING STORES THAT PAY. By Dr. Louis Parnes. The Architectural Record, 119 West 40th Street, New York 18. 316 pp. Illus. 11 x 8½. $15.

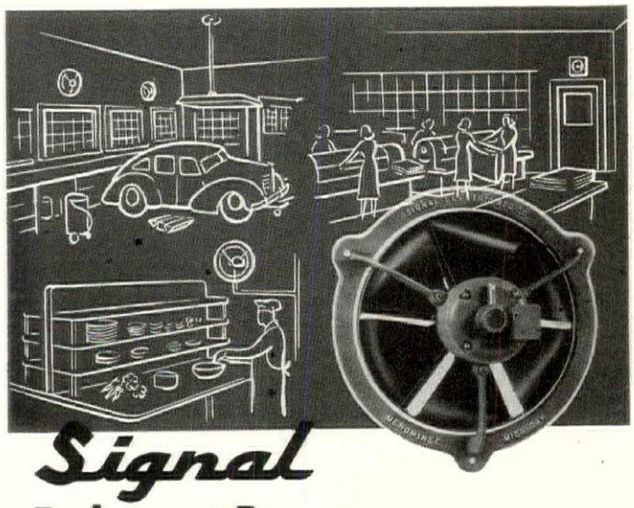
From the Horn of Plenty Department appears the second really important book on store design within four months. On a par with Morris Ketchum's *Shops and Stores*, Dr. Parnes' book differs in that it is limited solely to department store design—is less concerned with eye catching sales appeal than with the basic structure and layout.

It is not surprising to find that Dr. Parnes, who himself designed a widely known but never built department store, utilizing truss construction with merchandise storage between levels, advocates this type of building under many circumstances. Though to date only one modified version has been built in this country (Columbus, Ohio), many designers such as Raymond Loewy Associates have been working along similar lines.

There is surprisingly little duplication in the Ketchum and Parnes books. Actually in many aspects they complement each other. Whereas the former is more concerned with the physical appearance of the store and the general aspects of merchandising, Dr. Parnes emphasizes the city planning and architectural-engineering problems involved. M.S.

ART EDUCATION TODAY. Published by Teachers College, Columbia University, New York. 92 pp. Illus. 10 x 7½. $2.75.

Here is an exhaustive and informative pamphlet on the psychological, social and physical implications of modern art education which should be of great value to any architect interested in school design. M.S.



Signal

Exhaust Fans

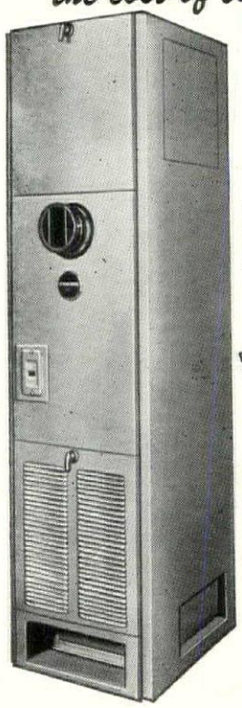
Hotel and restaurant kitchens, taverns, laundries and other places are kept clear of smoke, fumes and unsavory odors by hard-working *Signal* Exhaust and Vent Fans. See *Signal's complete* line of job-tested models . . . each model available in a number of sizes to meet varying requirements. Phone your nearby *Signal* Supplier, or write for FREE catalog today!

Model V-316 delivers 1400 C.F.M.; 3-speed controllers and automatic, weather-proof shutters available on all models.

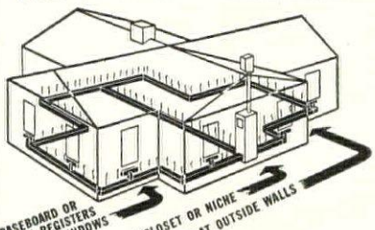
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RADIANT FLOOR PANEL HEATING *plus* FILTERED CIRCULATING WARM-AIR

Both in one unit - At less than the cost of conventional heating!



The INTERNATIONAL
WARM-AIR AUTOMATIC
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A truly great advance in modern heating engineering — that really overcomes the basic problems of home heating. Under-floor ducts eliminate cold floors and chilly walls . . . Base register banishes cold air cascading down windows . . . Elimination of air stratification assures uniform temperatures at all levels. Low cost installation — economical operation.

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Startling NEW IDEA

RUBBER TILE THAT CURVES

IT'S DANBURY WAVEDGE T.M.

Now rubber tile flooring has curves in it – not hand-cut designs – but curves formed with standard units. Yes, something revolutionary is here. It's Danbury WAVEDGE Rubber Tile. Danbury WAVEDGE tile enables you to create an endless variety of patterns with curved motifs – yet it is as simple to handle as conventional tile. WAVEDGE units are standard die-cut pieces – two equal parts of a square tile cut along a diagonal double curve.

With WAVEDGE, you have a new world of flooring beauty to place at your clients' feet. You can offer custom floors at a cost only slightly higher than a conventional installation. WAVEDGE is a Danbury development, and only Danbury has it. Write now for descriptive literature.



Back Hallway (foreground) of the same Dream House features repeat medallions of Ruby Red WAVEDGE tile on a field of Grey Paisley. The powder room has a Pale Blue WAVEDGE border on a field of Coral framed by black cove base.

Copyright 1948, The Danbury Rubber Company, Inc.

The DANBURY RUBBER COMPANY, Inc.
DANBURY • CONNECTICUT

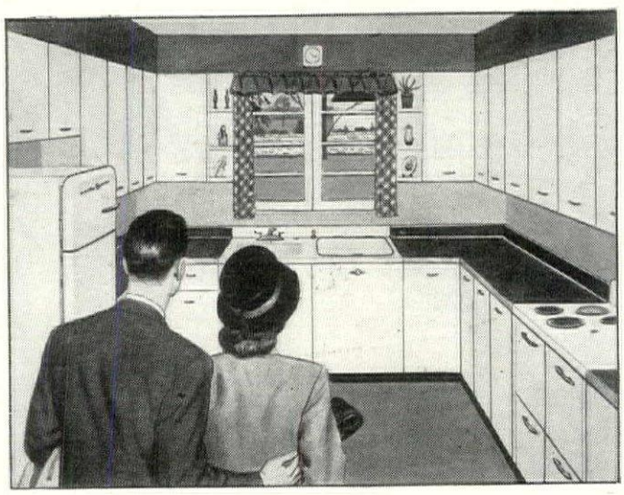
Patent Pending

DANBURY

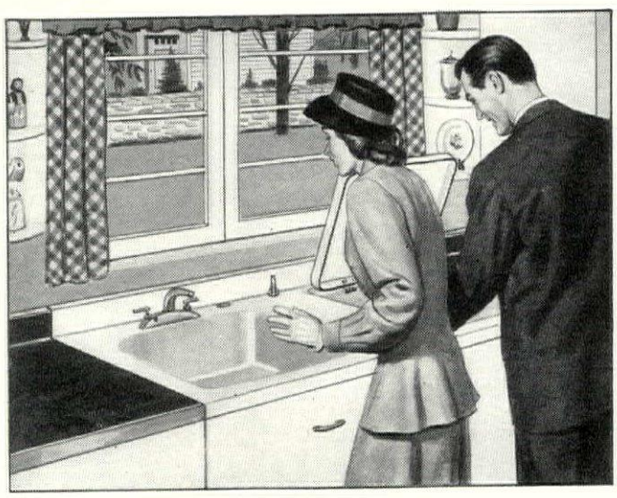


They're looking

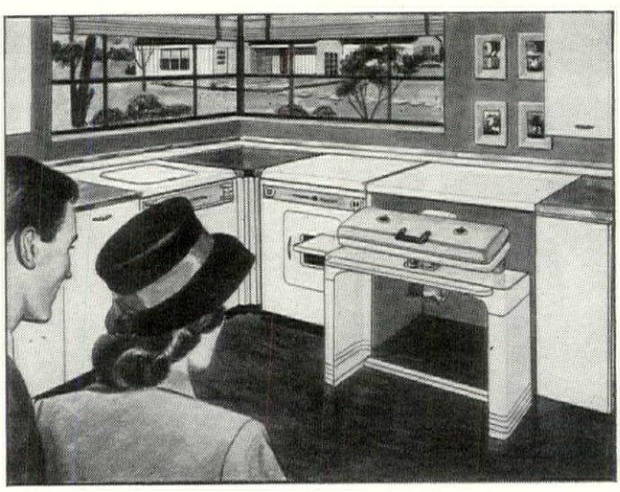
Seeing and Selling a General Electric Equipped Home



1. This beautiful General Electric kitchen-laundry inspires any buyer. In a nationwide survey, *51 per cent of the men and 53 per cent of the women said they prefer General Electric appliances.* Each appliance brings *you* extra profit.



2. The G-E way of living in action. This Electric Sink eliminates messy clean-up jobs. The homemaker saves weeks of work each year, gets *hours* of extra leisure each day. Operating cost: mere *pennies* a day!



3. What woman could resist this General Electric Laundry Center? In this bright, sunny corner, the housewife saves time, work, money. Quick-clean washing, fluff drying, effortless ironing, all help to banish washday drudgery.



4. Can they afford the G-E way of living? Yes, definitely, in a "packaged mortgage." It costs only up to $4.80 extra each month, much less than it would cost to buy any one of these appliances on the installment plan!

for a home that features...

The G-E Way of Living!

Today's home buyers seek houses that give them easier living... *electrically!* Let General Electric Home Bureau help you plan G-E equipped homes for extra profit opportunities and prestige—at first cost of only $4.80* extra a month to the buyer! Your cost: *zero!*

**When equipment is included in a long-term mortgage.*

What is the "G-E way of living"?

It means living in a house where the burdens of homemaking are shifted from *people* to modern *electric appliances!*

The G-E way of living is being enjoyed by thousands and thousands of families today in General Electric equipped homes. And today's home "lookers" are learning to insist on the comfort, convenience, and economy of the G-E way of living... in bungalows *and* in mansions.

In project after project—from ten homes to a thousand—it has been *proved* that—

G-E equipped homes bring the builder *greater prestige*—for a G-E equipped home combines beauty, efficiency, and economy—the best combination for sound sales appeal.

Talking cost and profit

The G-E way of living is *easily* within reach of the average prospect. A complete G-E equipped home costs him only up to $4.80 more a month, under the "packaged mortgage" plan.

And the buyer *saves* on operation and maintenance of efficient General Electric appliances... often, enough to cover the slight increase in the monthly payment!

Each appliance brings *you* extra profit—so your G-E equipped home is a *more profitable* home to sell.

So you see, the G-E way of living is practical for *you*—and for your prospect!

How can Home Bureau help you make profit out of the G-E way of living? Read the story below.

GENERAL ELECTRIC HOME BUREAU SUCCESS STORY OF THE MONTH

Everett E. Benjamin, New Jersey builder, writes: "We feel that whether the home is large and expensive or small and inexpensive, the completely modern *General Electric kitchen paves the way to a quicker sale of that home!*" And 90 new Benjamin foundations will soon be topped off by *more* houses with G-E kitchens and laundries!

Let us tell you the *whole* story. And let us show you how G-E Home Bureau can help you plan homes for *better living*—and help you sell them *faster!*

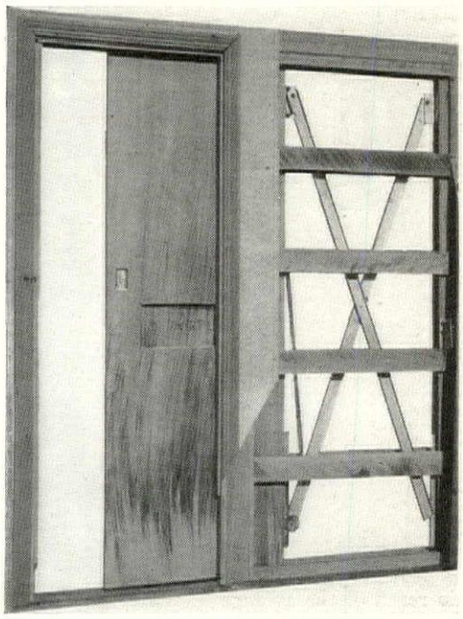
Just drop a post card to the Home Bureau, General Electric Company, Appliance and Merchandise Department, Bridgeport 2, Connecticut.

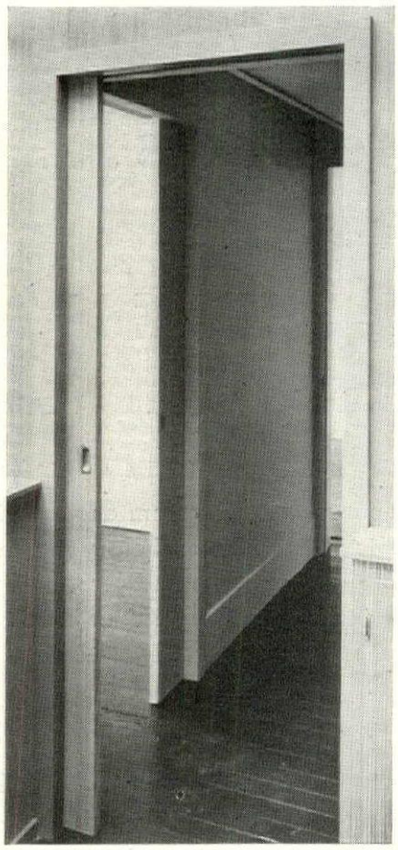


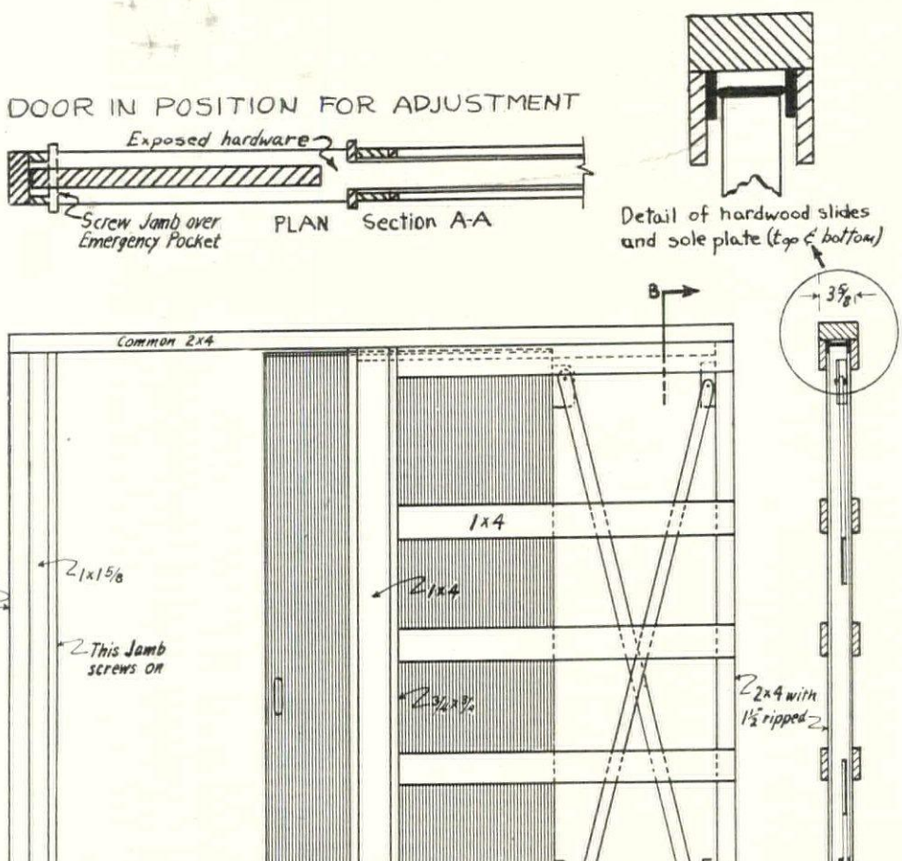
Everett E. Benjamin

GENERAL ELECTRIC

YOU CAN PUT YOUR CONFIDENCE IN GENERAL ELECTRIC







SLIDING DOOR HARDWARE eliminates tracks or doors
Unit is simple, has few moving parts.

The cantilever principle has been put to use in solving m building problems. The latest example of its use is in design of hardware for sliding doors. Russell J. Ry President of Dorflo Manufacturing, Inc., says that as as he knows his company has gotten the cantilever and sliding door together for the first time. Result is a sciss like mechanism which obviates any visible tracks or roll the door is hung on two vertical legs of the scissors a literally, hangs in mid-air. The other two vertical legs the scissors are fastened to a stud which is located appr mately a door-width away from the opening itself. Roll then, are vertical as can be seen on the accompany drawings. Guide strips, located inside the wall at the and bottom of the door prevent edgewise play. Trim, at of the door jamb can be made to form a groove at the of the opening itself to prevent edgewise play when closed door is nearly out of the slot hidden inside the w

Full weight of the door is on the hidden cantil mechanism which has been tested for weights up to 400 with little or no deflection. To be on the safe side, manufacturer suggests that the present unit not be used doors over 3 ft. wide by 7 ft. high. Thickness can either 1⅜ in. or 1¾ in. At this rate, a 3 x 7 ft. quarter polished plate glass door with a lightweight metal fr could be used on the hanger if proper hardware were veloped. The glass in such a door would weigh 3.29 lbs. sq. ft. or a total of 69.09 lbs.; this would certainly not p any strain on the hanger. As a matter of fact, a solid g door of twice this thickness could be used with safety w proper hardware has been developed. By increasing the and weight of the scissors unit, such a mechanism could designed to accommodate larger and heavier solid glass do

Rough openings for Dorflo must be slightly more t twice the width of the door to be hung; height of ro opening need be only 3¼ in. greater than the door hei Vertical jamb on the open side must be removable and vided with a pocket at least 1¾ in. deep to enable c hardware to be exposed for installation and adjustm Dorflo retails at $14.50 per set.

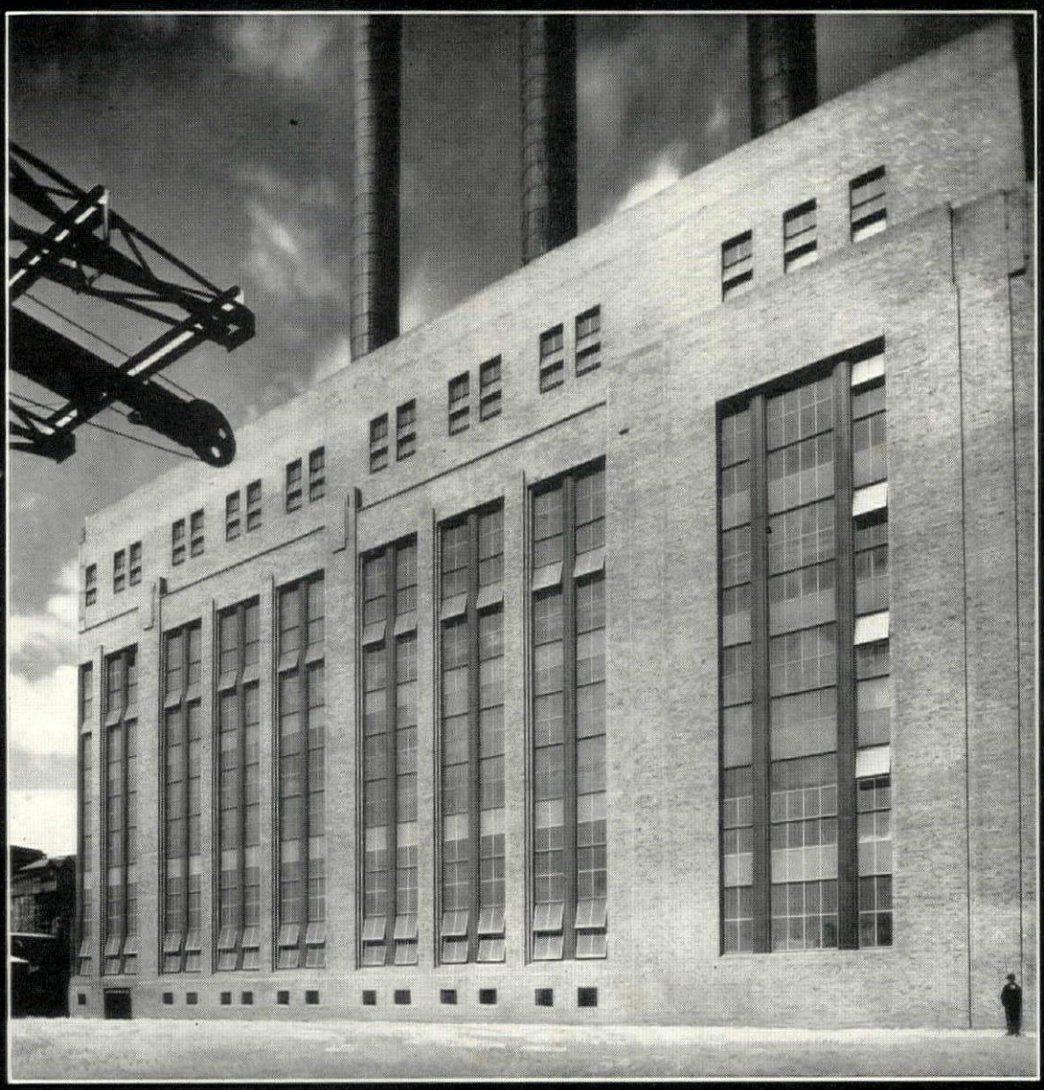
Manufacturer: Dorflo Manufacturing, Inc., 1902 First A Hibbing, Minn.

STOCK HOLLOW METAL ENTRANCE DOOR has m applications.

Detroit Steel Products Co. is offering a new Fenestra st hollow metal entrance door for use in offices, apartme stores, gas stations, schools and theaters. Furnished in standard size, 3 x 7 ft., it may be used in either single double openings and hinged right or left to swing in or Its hollow metal stiles and rails are made of 16 gauge st A bottom panel, ⅜ in. thick, is composed of two steel she separated by a layer of insulation. Like all Fenestra m doors, the new unit comes complete with frames hardware machined, fitted and ready to assemble and supplied with a standard cylinder lock. Bronze push and p bars and bronze ball bearing hinges are available if desi The manufacturer states that this new door, in addition reducing installation time for builders, also offers a saving a result of quantity production.

Manufacturer: Detroit Steel Products Co., 3111 Griffin Detroit 11, Mich. *(Continued on page 1*

1818 HOPE'S 1949

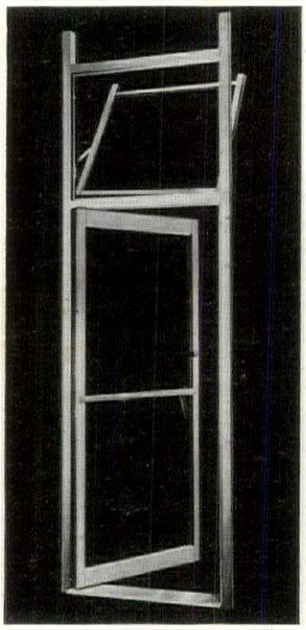


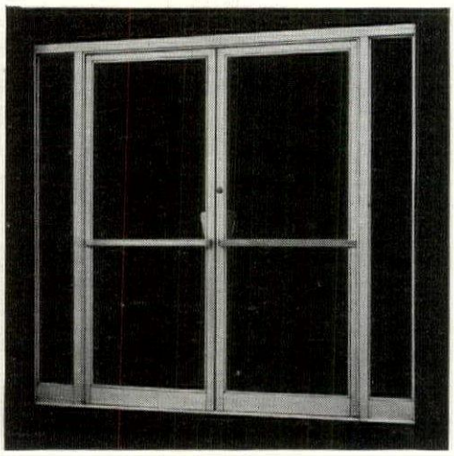
THE HOPE'S *LOK'D BAR* FACTORY SASH recently installed in this Power Station building are made to special size and layout. Their height, 63', 0", is indicated by the size of the figure in the lower right foreground. The mullions are 10 gauge pressed steel reinforced by structural members. Hope's *LOK'D BAR* Catalog describes, with full-scale drawings, the exclusive principle of their design, and Hope's Engineering Department will be glad to submit details for similar installations on request.

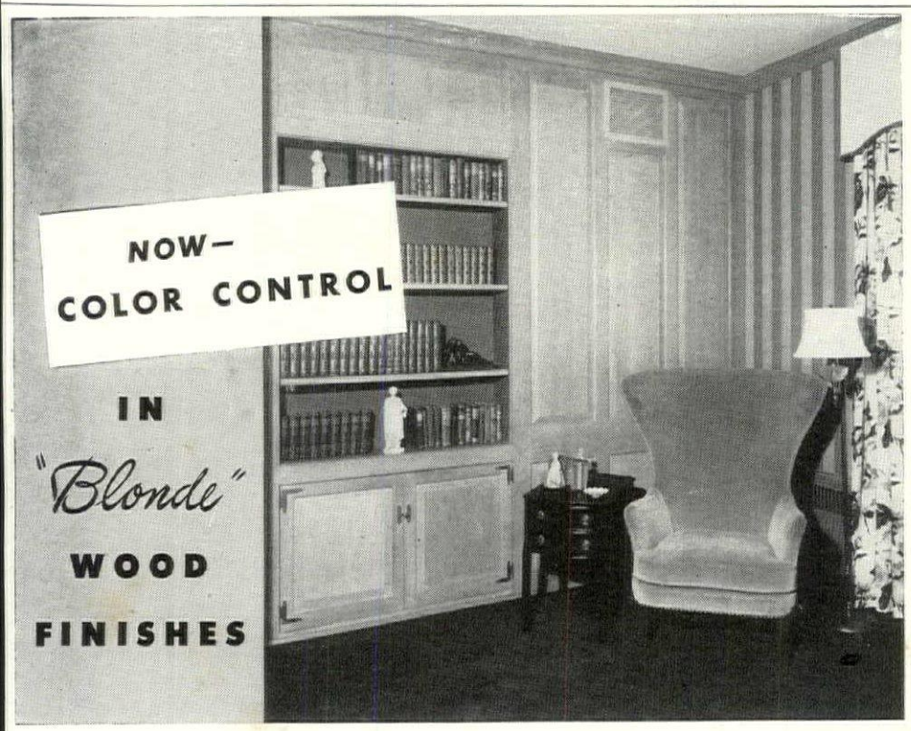
HOPE'S WINDOWS, INC., *Jamestown, N. Y.*

THE FINEST BUILDINGS THROUGHOUT THE WORLD ARE FITTED WITH HOPE'S WINDOWS

BUILDING REPORTER







PEN-CHROME WOOD FINISHES OFFER 10 USEFUL MODERN TINTS

Pen-Chrome "Blonde" Wood Finishes make it easy to harmonize the color of wood paneling, plywood, woodwork, trim with the color-scheme of any room or interior—give the designer new freedom and control in finishing wood surfaces!

Pen-Chrome brings out the natural beauty of wood as it seals, waterproofs, dries to a soft, lustrous finish. Its economy suggests a wide variety of applications in homes, stores, offices, hotels, institutions.

See your O'Brien dealer today, or write on your letterhead for new color folder and free sample. The O'Brien Corporation, 101 N. Johnson Street, South Bend 21, Indiana.

IN 10 USEFUL MODERN TINTS: Maple, Sandalwood, Bleached Mahogany, Driftwood, Platinum, Blonde, Light Oak, Dark Oak, American Walnut, Mahogany

BY THE MAKERS OF FAMOUS



O'BRIEN PAINTS

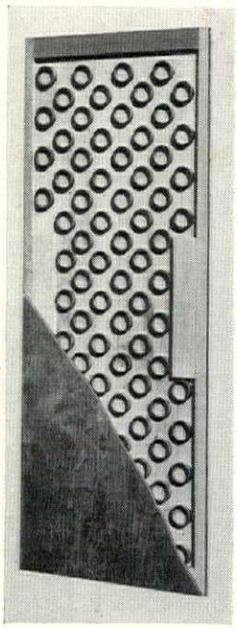
ADJUSTABLE, PACKAGED ALUMINUM DOOR AND JAMB features flexibility in installation.

Visulite narrow stile doors and jambs, constructed of highly polished, heavy gauge, extruded aluminum, are packaged units which can be adjusted on the job to fit varying installation conditions. Ordered from the drawing board, the jamb can be made applicable to any on-the-job condition by adjusting its top rail to any desired height and locking it in position with set screws provided at each end of the rail. The hinged fanlight can also be adjusted by sliding the top down and cutting off the excess on the two vertical rails. The new Visulite unit comes complete with hardware. The doors and jambs are set together with a patented internally stressed fastening. The door is fitted into the jamb and hardware such as hinges, lock, push bar and pull handles, are installed in the jamb at the factory. Doors can be set on single or double acting floor checks. Side lights and transoms can be had in these units. Fanlights can be installed on either side of the jamb. To install Visulite doors the jamb must be set plumb and level and fastened top and bottom. Installation time, the manufacturer reports, is about 2 hrs.

Manufacturer: Martin Katz Corp., 625 Bergen St., Brooklyn 17, N. Y.

FLUSH DOORS combine durability and lightness.

General Plywood's new Flush Doors are flush, hollow cored, veneered doors of the stress skin type for exterior and interior use. Soundly constructed and light in weight, they are reported to be easy to handle and install and to be little subject to warping and sagging after installation. The core of the new door consists of rigid rings, 3 in. in diameter, which are scientifically spaced in staggered pattern to give uniform support and maximum strength to the door faces. The polished veneer facings, built up of 3-plys of 1/15 in. rotary cut southern hardwood gum plywood, readily take paint, stain, natural and varnish finish. Poplar rails and stiles are joined with accurate dowel construction. Two lock blocks, placed equidistant from top and bottom rails, and all components, are securely cemented with strong adhesives. General Flush Doors are precut to exact standard size but allow for trimming. They are available in a range of sizes 1⅜ in. and 1¾ in. thick, and in three grades: Super-Select (selected and matched for color); Grade 1 (unselected for color but symmetrically matched); Grade 2 (unselected for color and unmatched). For exterior application, several sizes are manufactured with fully waterproof boil-test resin.

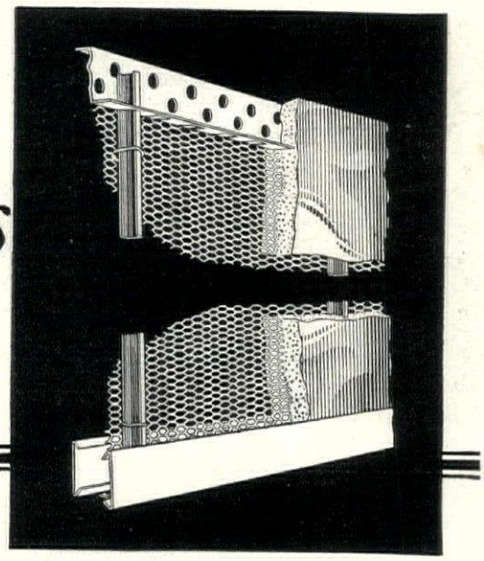


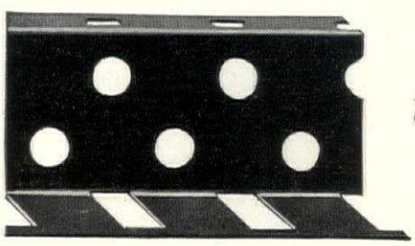
Manufacturer: General Plywood Corp., Louisville, Ky.

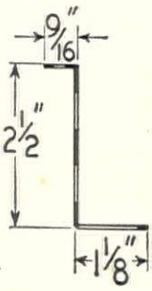
ALUMINUM CASEMENT WINDOW uses interlocking corners; muntins are optional.

Constructed with 5/32 in. thick extrusions and mechanically joined corners, the *(Continued on page 162)*

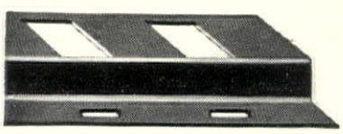
Erection *of Solid Partitions* Simplified...

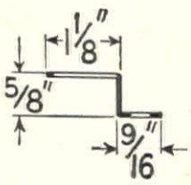






Ceiling Runner





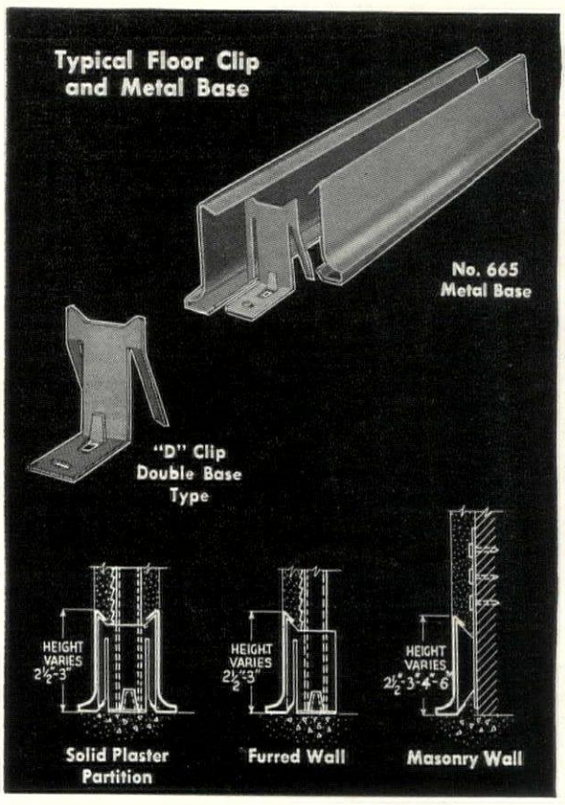
Floor Runner

New MILCOR System

. . . provides two versatile combinations of partition members

1. **¾" Cold-Rolled Channels with Ceiling Runner and Floor Runner**

2. **¾" Cold-Rolled Channels with Ceiling Runner, Floor Clips, and Metal Base**



It takes less time to erect steel for solid partitions, with this new Milcor system.

Ceiling and floor runners, or floor clips, are attached with stub nails, anchor bolts, or Rawl Drives. Special slotted design of runners permits channel studs to slip quickly into place.

The channel studs run from floor to ceiling, supporting the metal lath which functions as a plaster base. The metal lath reinforces the partition in all directions.

Where floor clips and metal base are used in place of floor runners in this Milcor System, the metal base acts as plaster grounds and eliminates the need for base screed.

This new development now makes it more practical than ever to give your client the advantages of a 2-inch solid partition: resistance to physical impact, fire, wind, water, sound, and vibration.

The same units used to build Milcor Solid Partitions also improve the mechanical efficiency of installing free-standing furring walls.

Consult the Milcor Manual in Sweet's Architectural File, for helpful information on the new Milcor Solid Partition System and the complete Milcor line of steel building products. Write today for latest bulletin on Milcor Solid Partitions.

INLAND STEEL PRODUCTS COMPANY

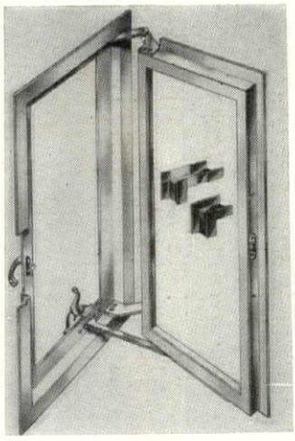
FORMERLY MILCOR STEEL COMPANY

MILWAUKEE 1, WISCONSIN

Baltimore 24, Md. • Buffalo 11, N. Y. • Chicago 9, Ill. • Cincinnati 25, Ohio
Cleveland 14, Ohio • Detroit 2, Mich. • Kansas City 8, Mo.
Los Angeles 23, Calif. • New York City 22, N. Y. • Rochester 9, N. Y.
St. Louis 10, Mo.

F-298

BUILDING REPORTER



Timm Aluminum Casement Window features a new interlocking, patented tenoned joint for extra strength and rigidity. Because of these heavy extrusions and interlocking joints, the manufacturer claims no muntins are required in the windows for structural strength. They may be added for architectural effect, however, if desired. Timm's prices are based on an optional muntin plan which starts with the basic window without muntins and increases as muntins are added. This policy, Timm claims, gives custom design at production price.

Manufacturer: Timm Industries, Inc., 5245 West San Fernando Road, Los Angeles 26, Calif.

SPRAYABLE PLASTIC COATING provides both colored and textured finish for concrete, brick or block construction.

Scotch Top Plastic Wall Covering is a new sprayable coating for finishing monolithic concrete, brick or block constru walls. Providing both color and texture in a single opera it can be applied to brick, poured or precast concrete, n cinder or other aggregate type blocks and may be used dir on inside or outside wall surfaces. According to the man turer, the coating has high resiliency and impact resist It also withstands scuffing, grease, oil, water, sunlight exposure to weather and can be washed with soap and w or with common detergents. If desired, it can be sprayed a waterproof compound to prevent condensation and to l the passage of moisture, or used with sprayable insul compounds to yield an effective barrier against heat and Scotch Top, an hydraulic setting material, is shipped in parts: a liquid binder composed of latices (synthetic rubb and a powder composed of plastic materials and asb fibers. The two parts are mixed on the site with water w serves as the vehicle for spraying, and the mixture is ap to varying thicknesses from a thin film to a ½ in. or coating. Available in white and 12 shades of green, red yellow, the product permits a variety of textures inclu soft or coarse stipple, stucco, jazz plaster, broom and fla ish, all without gloss. Coverage varies from 5 to 13 sq. f lb., depending on the job done. The manufacturer re Scotch Top has been carefully tested and will be natio available as soon as skilled applicator crews can be tra Meanwhile, it will be offered in Chicago and a few other a

Manufacturer: Minnesota Mining & Manufacturing Co. Fauquier St., St. Paul, Minn.

LAMINATED SURFACING MATERIAL can be applie most smooth surfaces without mechanical pressure.

Raiflex is a new decorative phenolic melomine laminate, in. thick, which can be applied easily to surfaces wi mechanical pressure. Used for counter and table tops, window sills, doors, mop boards, ceilings and wainscoti can be applied on-the-job to practically any smooth su with a special brush cement and hand pressure only. I be bent on a large inside or outside radius and can b with a large scissors or fine saw. Impervious to practical household solutions, Raiflex withstands heat to 275° F reportedly has a high resistance to impact. It has a semi- washable finish, and is available in a number of non-f colors in panels 24 in. wide x 24 in., 42 in., and 72 in. 30 in. wide x 30 in., 42 in., 48 in., and 60 in. long; and wide x 36 in. and 72 in. long.

Manufacturer: Reiss Associates Inc., Plastics Div., Beacon St., Boston, Mass.

NEW HEAVY-WEIGHT ASPHALT SHINGLE with triple erage features massive appearance.

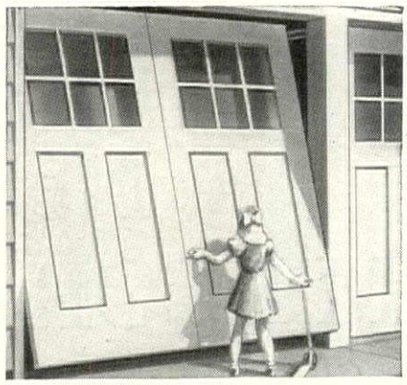
Designed primarily for expensive homes and the institut trade, the "Architect" is a new heavyweight asphalt sh with triple coverage. It boasts three desirable shingle tures: thickness of butt approximating slate, heavy-w and triple coverage; the first two elements are achieve using a heavier felt and more asphalt saturant and coati balanced proportion. This is reinforced by an initial surf of standard granules and a coarse granule overlay on the portion. The "Architect" is a 15 in., 3-in-1 strip which i 5 in. to the weather, gives extra protection of triple cove and a 5 in. headlap. It weighs 290 lbs. per square and be manufactured in three blends and three straight c

Manufacturer: Bird & Son, Inc., East Walpole, Mass.

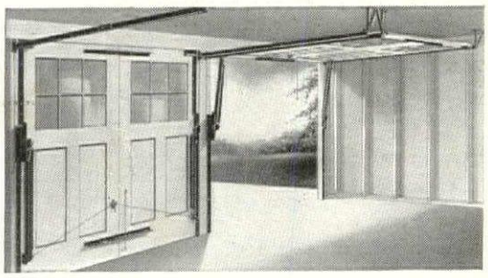
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EASY...

EVEN FOR A CHILD!



To Provide the Newest, Most Modern Overhead Door Convenience



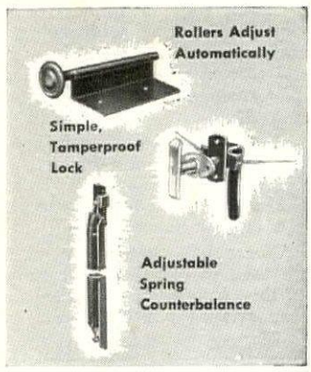
Specify

Richards-Wilcox nine ninety nine 999

GARAGE DOOR HARDWARE

Ordinary obstacles, and seasonal "headaches" such as slush, snow, and freezing temperatures are nothing to worry about when garage doors have been converted to the *overhead* door convenience made possible by Richards-Wilcox Garage Door Hardware. And with the new R-W nine-ninety-nine line the conversion process is swift, easy, economical. Everything needed for installation and operation, all hardware including tracks, comes complete in one carton. Requires only ½" headroom.

For modernization, or in planning new structures, specify overhead garage doors with R-W 999 Hardware, and be sure of doors that will function smoothly, quietly, effortlessly—so easy even a child can operate them. For further information about R-W 999 Garage Door Hardware, call the nearest Richards-Wilcox office, or write for free folder.



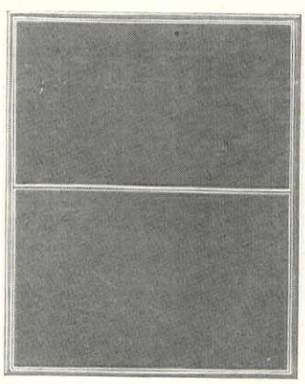
1880 1949
LEADERS IN DOOR HARDWARE
OVER 69 YEARS

Richards-Wilcox Mfg. Co.
"A HANGER FOR ANY DOOR THAT SLIDES"
AURORA, ILLINOIS, U.S.A.
Branches: New York Chicago Boston Philadelphia Cleveland Cincinnati Washington, D.C. Indianapolis St. Louis New Orleans Des Moines Minneapolis Kansas City Los Angeles San Francisco Denver Seattle Detroit Atlanta Pittsburgh

RICHARDS WILCOX R-W AURORA



CECO HELPS A MONUMENT OF MERCY BREATHE...



METAL FRAME SCREENS

Standard types and styles for every purpose—for wood or metal windows. Wired with rustproof, clear-vision screen cloth.

One of the truly important details in a hospital is ventilation, and that, in a sense, is where Ceco helped beautiful Los Angeles County Hospital to breathe. Ceco installed the metal frame screens which, of course, provided a means of ventilation. This was done at a saving, too, because Ceco screens cost less than ordinary screens—they are factory finished, eliminating on-the-job painting, trimming and fitting. They are easy to put up and take down—will not warp, shrink, twist or rot.

Other Ceco Products used in the Los Angeles County Hospital were steel bars and welded wire fabric which provide a positive bond and add strength in reinforced concrete construction.

CECO STEEL PRODUCTS CORPORATION
General Offices: 5601 W. 26th St., Chicago 50, Ill.

Offices, Branches and Fabricating Plants from Coast to Coast

CECO STEEL ®

In construction products **CECO ENGINEERING** *makes the big difference*

BUILDING REPORTER



PLASTIC FLOOR TILE combines the advantages of resilient floor coverings.

Heading Armstrong's extensive flooring line this year is a brand-new plastic tile known as Corlon. Developed after years of research for the top-end of the floor covering market, it is said to combine in one floor, all the individual advantages of other resilient floor coverings. The manufacturer maintains it is more wear resistant than any other, and also offers high resistance to indentation and grease, has depth of color, beautiful graining and the plate finish of rubber tile. Finally, Corlon Tile is alkali resistant, which permits it to be applied over grade floors. The new flooring is being offered in 6 x 6 in., 9 x 9 in., 12 x 12 in., and 18 x 36 in. sizes in ⅛ in. gauge. All patterns are in marbelized colors. The ten being offered are: Gardenia White, Pewter Gray, Jet Black, Venetian Red, Desert Tan, Walnut Brown, Twilight Blue, Sand Taupe, Spruce Green, and Wine Red.

Manufacturer: Armstrong Cork Co., Lancaster, Pa.

FAST DRYING FLOOR SEALER saves time for the floor finisher.

Developed to save time for the floor finisher, American Fast Drying Floor Seal dries in 1½ hrs. to allow complete floor surfacing, sealing and waxing in one day. Not a lacquer and containing no lacquer solvents, the product is described by the manufacturer as a safe and dependable high quality clear material which produces a long wearing, water and alkali resistant finish. It is recommended for use on wood surfaces but can also be effectively applied on linoleum, concrete, cement or cork. For best results, two coats are recommended.

Manufacturer: The American Floor Surfacing Machine Co., 511 South St. Clair St., Toledo, Ohio.

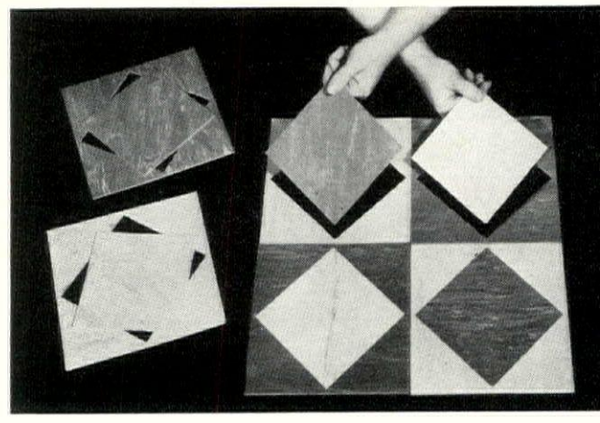
ALKALI RESISTANT CONCRETE FLOOR ENAMEL covers concrete floors satisfactorily above and below grade.

A new alkali-resistant floor enamel, Colorfloor XX can be easily and quickly brushed on above or below grade concrete floors to give them a bright appearance. The rubber-base interior enamel can be safely used as long as no hydrostatic pressure exists, and is especially recommended for recreation rooms in basements and for on-grade concrete floors such as are used in stores, show rooms and ranch type homes. Its durable finish resists acids, alkalis, soaps, oil, grease and alcohol, and in addition, offers good abrasion resistance. On dry concrete floors, two coats of Colorfloor XX reportedly furnish a long lasting finish. No special primers or sealers are necessary for application. It is available in red, medium gray and dark green, and leaves no lingering after-odor.

Manufacturer: The Tremco Manufacturing Co., 8701 Kinsman Road, Cleveland, Ohio.

SPECIALLY CUT RUBBER TILES permit unusual floor designs.

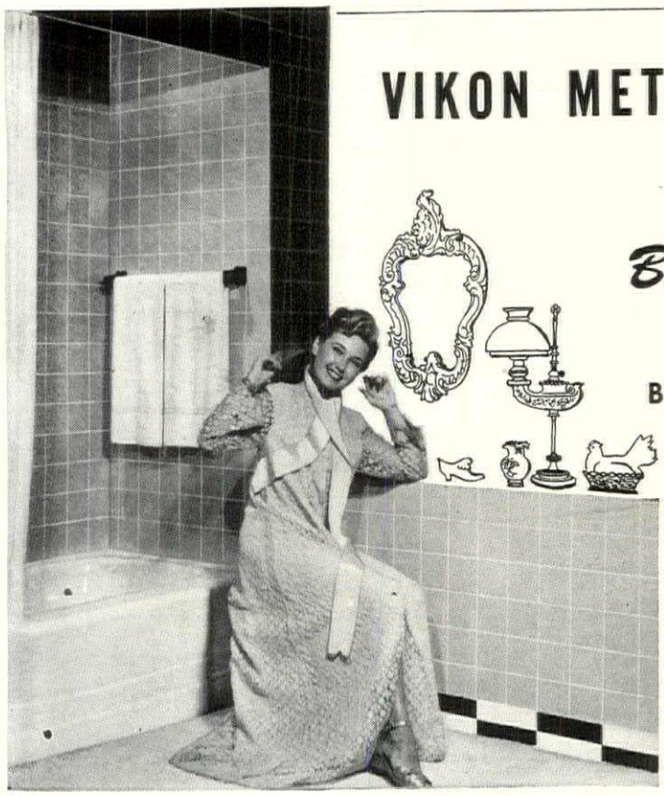
Fremont Rubber Co. has recently introduced Duo-Cut, a specially cut rubber tile for achieving unusual floor designs.



Duo-Cut is made by bevel die cutting regular 9 x 9 in. rubber floor tiles so that a 6 x 6 in. square can be readily removed from the inside. In this space is inserted another square of a different color. Fremont tile is available in 13 plain and marbelized colors.

Manufacturer: Fremont Rubber Co., 123 McPherson Highway, Fremont, Ohio.

(Continued on page 166)



VIKON METAL TILE

THE *Better Buy* FOR BUILDERS

BEAUTY *and* ECONOMY *combined*

Now it's easy (on the budget) to give the custom look to every room where tiles are appropriate. Use Vikon Metal Tile . . . watch the beauty grow as each individual tile is set in place. Feather-light aluminum or steel bases eliminate need for extra wall strengthening. Apply over any smooth surface. Choice of 27 fade-resistant decorator colors and stainless steel. Their durable faces of baked-on synthetic enamel make them simple to maintain. Periodic waxing keeps them beautifully bright.

VIKON METAL TILES . . .

• will not chip, crack or craze • highly resistant to heat and chemicals
• fire-resistant, waterproof • seals out insects

Write today for full information • See our catalog in Sweet's Files

VIKON TILE

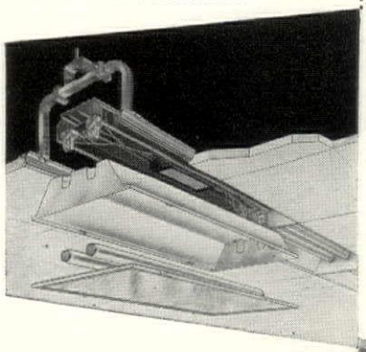
BEAUTY • ECONOMY — COLOR FUSED ON METAL — DURABILITY

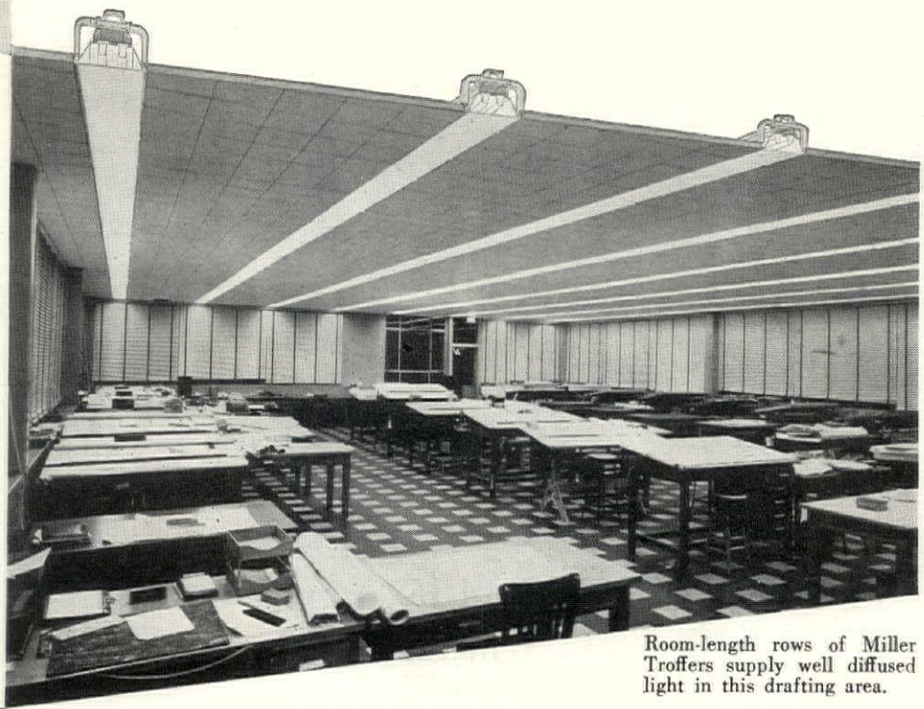
VIKON TILE CORPORATION, WASHINGTON, NEW JERSEY

It Pays to Plan Lighting at the Drawing Board the MILLER Way

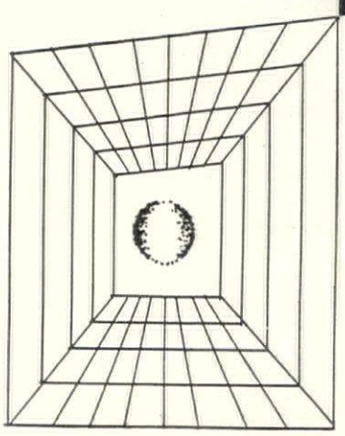
1

All parts are of quality construction. Channels are Bonderized for rust resistance.





Room-length rows of Miller Troffers supply well diffused light in this drafting area.



IT PAYS — because, besides providing the good lighting required. Miller Fluorescent Troffer Lighting Systems are a definite structural aid, most flexible for working out esthetic ceiling design and insuring architectural harmony . . . "CEILINGS UNLIMITED".* IT PAYS — because their wide range of reflector enclosures meet the lighting requirements of varied interiors. IT PAYS — because installation is simplified by Miller patented Ceiling Furring Hanger.

Miller lighting service is all-inclusive. It covers the needs of planned commercial and industrial lighting. Miller field engineers and distributors, conveniently located, are at your call.

THE miller COMPANY

SINCE 1844

ILLUMINATING DIVISION, MERIDEN, CONNECTICUT

ILLUMINATING DIVISION: Fluorescent, Incandescent, Mercury Lighting Equipment; HEATING PRODUCTS DIVISION: Domestic Oil Burners and Liquid Fuel Devices; ROLLING MILL DIVISION: Phosphor Bronze and Brass in Sheets, Strips and Rolls

*Reg. Trademark U. S. Pat. Off.

BUILDING REPORTER



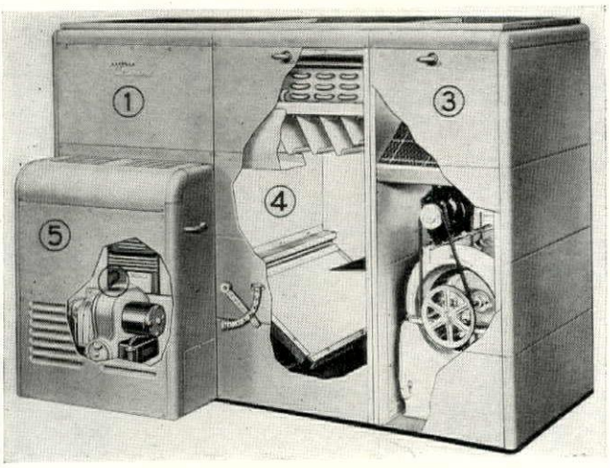
LINOLEUM in tile form permits individual floor designs, can be installed by the homeowner.

Sloane-Blabon is now offering its marbelized standard-gauge linoleum in 9 x 9 in. tiles. Designed primarily for installation by the homeowner, the flexible, easy-to-cut squares permit individual floor designs by the combination of two or more colored tiles. The new floor covering can be cut or trimmed with shears or a linoleum knife and can be installed over any suspended floor in the house. It is not recommended for basement or on-grade installations, however. The new marbelized tiles are available in nine complementary and contrasting colors that include: blue, green, red, yellow, gray, brown, black, white, and red and black overtones on a white field. They come packaged 120 tiles to a box, and retail for approximately 16 cents each. One box is estimated to cover about 7½ sq. yds. of floor area, or an average-size bathroom.

Manufacturer: Sloane-Blabon Corp., 295 Fifth Ave., New York 16, N. Y.

HOME FURNACE can be built into complete automatic winter and summer air conditioning plant as budget permits.

The new Mueller Climatrol Modular Furnace is the L. J. Mueller Furnace Co.'s approach to reducing building costs through modular coordination. Claimed by the manufacturer to be a new idea in home heating, the units are designed to permit the homeowner to purchase a complete, fully automatic winter air conditioning furnace and summer cooling unit all in one package, or by steps, as his budget permits. The basis for the Mueller Climatrol Modular Furnace is standardization and interchangeability of component parts. This permits the owner to install a basic unit, a gravity warm air furnace with oil or gas firing, and add his packaged forced circulation blower unit and finally the summer cooling unit

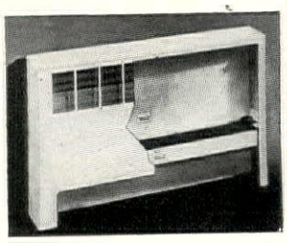


without sacrificing any of the original equipment. The interchangeability of parts and accessories is also reported to reduce manufacturing, dealer inventory and warehousing costs. The basic modular units shown in the cut away illustration include: (1) gravity furnace with square casing; (2) gas or oil burner (atomizing or vaporizing—behind vestibule); (3) forced circulation unit for filtering and humidifying warm air; (4) cooling unit with by-pass arrangement for controlling summer humidity; (5) vestibule for enclosing burner and controls.

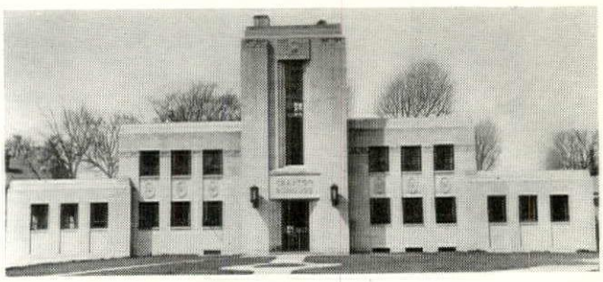
Manufacturer: L. J. Mueller Furnace Co., 2005 West Oklahoma Ave., Milwaukee 7, Wis.

NEW CONVECTOR LINE combines appearance and high heating efficiency.

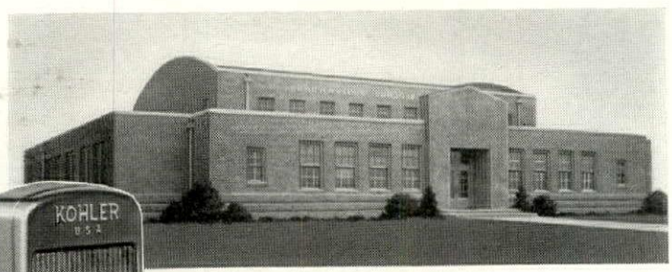
This new line of Type F convector-radiators, available in standard 4, 6, 8, and 10 in. widths, in lengths up to 64 in., is designed for use with steam and gravity or forced hot water heating systems. The units are suitable for a wide range of residential, institutional and commercial installations, and are reported to combine attractive appearance, high heating efficiency and active circulation of heated air to help achieve more uniform temperatures in the living zone. The steel cabinets, designed for



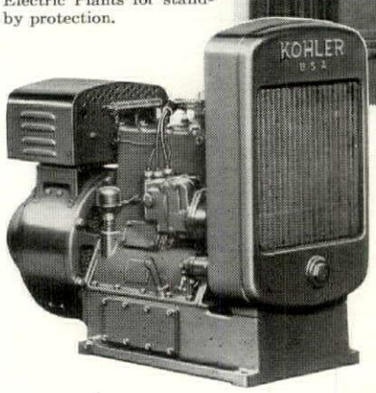
(Continued on page 168)



Municipal Building, Crafton, Pa., where a Kohler Electric Plant provides emergency current for lighting circuits in halls, boiler room and council chamber. Pennsylvania requires stand-by protection in all public buildings.



Brownville School, Brewster, Kans., one of the hundreds of educational institutions which have Kohler Electric Plants for stand-by protection.



Kohler Electric Plant 3A21, 3KW, 115 Volt AC. Automatic start and stop. Length, 41"; Width, 16"; Height, 28"

For stand-by protection include a

KOHLER

Electric Plant

in the specifications

You provide a valuable service for your clients when you specify a Kohler Electric Plant for reliable emergency electric current when storms or accidents cause failure of central station supply. Kohler Electric Plants take over the load automatically, without delay, assuring uninterrupted lighting in hospitals, stores, schools, public buildings and other places—and both light and power used in such places as police radio stations, sewage disposal plants, utilities and homes.

Kohler Electric Plants are especially engineered for emergency purposes, require little attention and are easily installed to take over any part of the load. Sizes 750 watts to 10 KW. A Kohler field representative will gladly help determine proper specifications for particular needs. Write for illustrated Folder E-17. Kohler Co., Kohler, Wisconsin. Established 1873.

KOHLER OF KOHLER

PLUMBING FIXTURES • HEATING EQUIPMENT • ELECTRIC PLANTS

REVERE QUALITY HOUSE INSTITUTE

ENTERS SECOND YEAR

REVERE
QUALITY HOUSE
INSTITUTE

BUILDER PRAISES INSTITUTE

"You asked me to tell you in a few words what I have gained as a member of the Revere Quality House Institute. I'll tell you in a few words, but you must permit me to elaborate just a little.

"Prestige is something every merchant builder can use in his respective community. We are moving gradually, but steadily, into a market in which the first requisite is customer confidence. Prestige derived by being a member of the Revere Quality House Institute instills the needed confidence in the mind of every prospective purchaser. In Cleveland the word 'Revere' has become synonymous with 'quality' and all my houses are referred to as 'Revere Houses'.

"It is very difficult to put into a letter all my thoughts and feelings about the Institute — I could write a volume about the Revere Quality House Institute. It has been an honor and a privilege to have been chosen a member. Sometimes I feel very guilty receiving so much without being able to repay something — even in a small way. I couldn't buy the benefits I have gained from the Institute with any sum of money. It's one thing to advertise and 'toot your own horn', but it certainly makes a difference coming from a qualified Institute such as ours.

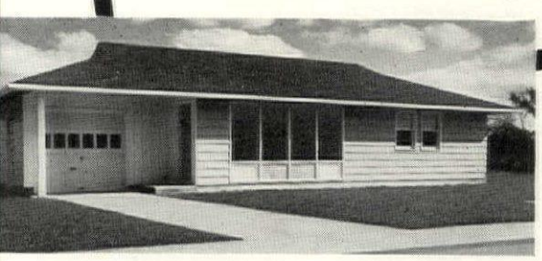
"I am proud and consider it a privilege to be able to display the seal of the Revere Quality House Institute. Not only has it resulted in the sale of many homes, but we have gained the respect of every builder, lending institution, government official, and every other segment of the building fraternity for including so much quality in a merchant-built house. So much for the prestige gained.

"The Institute has greatly influenced my thinking and enhanced my knowledge in both the fields of designing and construction. Association with and through the exchange of ideas with Mr. Riddle and the other Architect Builder members infinitely broadened my vistas and goals as to the type and kind of house we must deliver to the public. I learned that Architects and builders are interdependent and can and must work together, in all fairness to themselves and to the general public, to create the best quality house for the least money.

"Never was I so beneficially influenced in my thinking about houses, in just a matter of hours, as I was at the several meetings held by the Institute in Chicago and New York this year. Indeed, it was a pleasure and a revelation in exchanging ideas with some of the top men in the building industry.

"In closing, let me again point out to you the above are just a few of the many benefits I have derived as a member of the Institute."

M. J. Fishman
PRECISION HOUSING CORPORATION
Parma Heights, Ohio



f 44 Revere Quality Houses in Parma Heights eland), Ohio. Architect, W. D. Riddle, Willy, O. Veterans Preference by the builder, ce J. Fishman, Parma Heights.

The demonstrated success of the Revere Quality House Institute during its first year of operation is convincing proof that the Institute fills a need and has a bright future of expanded service to the American people, who have shown such a deep interest in, and appreciation of, its aims and purposes.

Those purposes are: to improve the quality of housing design, materials and workmanship, especially in the moderate-cost field; to improve the efficiency of house construction; to cooperate with others in coordinating house design, finance and construction; in general, to contribute, in an advisory capacity, to the intensification and extension of housing research and development.

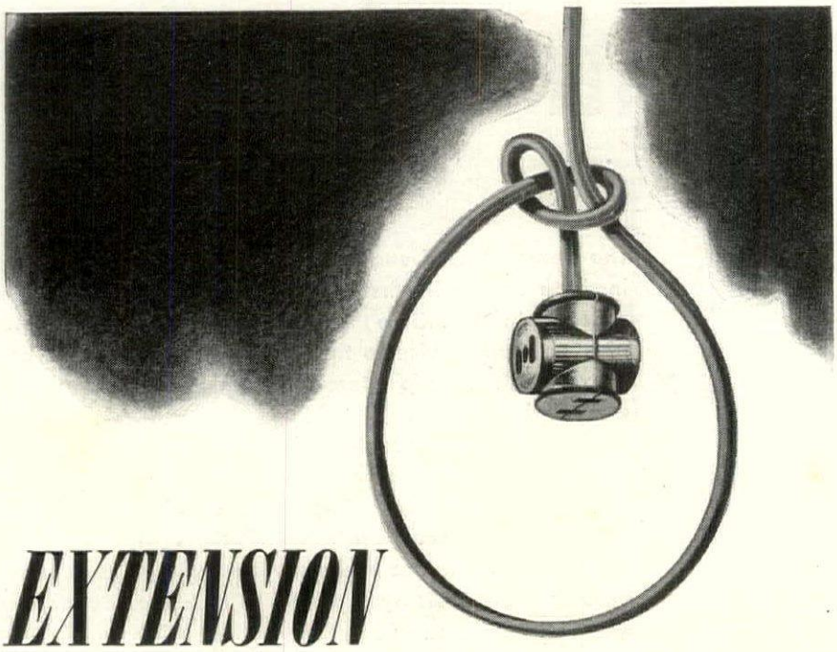
The Institute pledges itself to the energetic furtherance of these aims during this, its second year. To that end it has embarked upon a considerably enlarged program, through which the Institute will reach and be of service to a vastly greater number of the American people.

REVERE QUALITY HOUSE INSTITUTE
John Hancock Callender, Technical Director C. W. Smith, Administrative Director
280 Madison Avenue, New York 16, N. Y.

INSIST ON QUALITY MATERIALS

Revere Building Products are a mark of quality. They give lasting protection against damage because they cannot rust. Trouble always costs more than Revere Products. They include: Sheet Copper for flashing, roofing, gutters, downspouts, cornices and the like; Copper Water Tube for plumbing and heating lines, including radiant panel heating; Red Brass Pipe for water lines; Revere Home Flashing, a packaged product complete with illustrated instructions for approved installation; Sheet Copper and Herculoy for water heaters and storage tanks; Brass and Bronze for weather strips, hardware and plumbing fixtures; panel sheets of Bronze, Nickel Silver and Copper for facings, doors, spandrels, etc.; Architectural Bronze, Aluminum and Nickel Silver extruded shapes for thresholds, window frames, grilles, handrails, counters and the like. These quality products make a house better to live in, easier to sell or rent, and add materially to its value . . . A Revere Technical Advisor, Architectural, well acquainted with the selection and application of Revere Metals, will be glad to consult with you without obligation.





EXTENSION CORDS CAN "hang" YOU!

Don't let prospective buyers see the need for unsightly and dangerous extension cord entanglements, due to a lack of convenience outlets in your homes. These are the things on which a sale can hang—or they can hang *you!*

An adequately wired home sells readily at a good price, because home buyers nowadays have learned to look for Adequate Wiring.

An Adequate Wiring Certificate is your proof that each house you design and build has:

- **Enough outlets, fixed lights and switches.**
- **Adequate electric service entrance equipment, fed by three ample size wires.**
- **Enough branch circuits and spares for present and future electrical needs.**

The Sign of the Times

Use the services of the local Adequate Wiring Bureau in preparing a complete Adequate Wiring layout and specification, *before* you put the electrical job out for bids. Get the wiring into the plans for better appraisal —a better loan!

If there is no Adequate Wiring Bureau in your community, write us or your local electric utility for information on how to take advantage of Adequate Wiring in the homes you build.



USE THIS COUPON ***if there is no Adequate Wiring Bureau in your area***

NATIONAL ADEQUATE WIRING BUREAU, Dept. AF-2
155 E. 44th Street, New York 17, N. Y.

Please send me, without charge, information on how to take advantage of Adequate Wiring as a sales feature.

NAME .....

TITLE .....

STREET ADDRESS .....

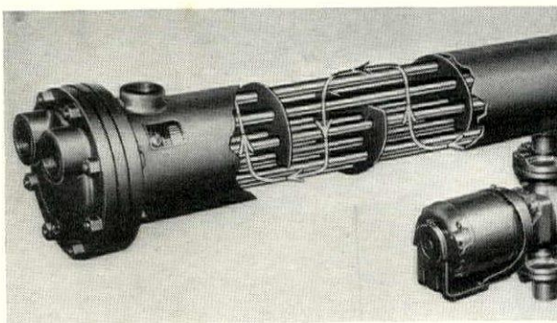
CITY .....

either free standing or semi-recessed installations, have e removable front panels with integral stamped louvers to proper directional circulation of air into the room. Fec Type F heating elements have copper tubes and alumi fins designed to assure prompt response to modern heat trols. Fin holes have die-formed collars which give large transfer contact between tube and fin. Adjusting screws vide proper pitch of element to suit installation condit Headers are arranged for convenient piping connectio either end, top or bottom. If desired, Fedders Type F he elements can be purchased without convector cabinet.

Manufacturer: Fedders-Quigan Corp., 57 Tonawanda, falo 7, N. Y.

TANKLESS WATER HEATER offers greater gallonages sq. ft. of heating surface.

Bell & Gossett's new "WU" Series Tankless Heater has designed to meet the demand for the larger type tankle instantaneous indirect heating unit. According to the m facturer, it will heat more gallons of water per sq. heating surface than any similar heater on the market t



The new unit is made for use with a circulating pump o boiler water side. The tube bundle has a baffling arr ment outside the tubes to insure complete wiping a along the entire length of the tube bundle. By empl the circulating pump to circulate the boiler water ove coil, the design greatly increases heat transfer.

Manufacturer: Bell & Gossett Co., Morton Grove, Ill.

TWO LAVATORIES are introduced for commercial, in tional and factory buildings.

Crane Co. has recently introduced two new vitreous lavatories, the Lavalux and the Sanicor (illustrated), fo in places where automatic water shut-off is important. Be the units are designed for washing in running water wi the necessity of filling the basin and water in both is delivered through a single anti-splash spout. A foot pedal controls the flow of water while a hand valve, mounted on top of the lavatory shelf permits adjustment of the water temperature. A pop-up plug with its operating handle at the back of the spout closes the drain when filling the basin is necessary.



The Lavalux is a 18 x 15 in. flat back lavatory for wall m ing. The Sanicor is a space-saving corner lavatory meas 17 x 17 in. Both units come in white or a variety of col

Manufacturer: Crane Co., 836 S. Michigan Ave., Chic Ill.

(Continued on pag

at concrete floor prices you can get

the beauty and durability of tile

For concrete floors of tile beauty and durability, specify the use of Colorundum. For hotels, banks, stores, hospitals, service stations and factories you get bright, colorful floors with an armor plate surface—at the cost of an average concrete floor. Colorundum is a dry powder floated and trowelled into the floor topping. It is composed of powerful coloring agents, fused aggregates, waterproofing and hardening elements and cementitious binders. The colorful non-slip, dense surface is an ideal flooring for ndoors or outdoors . . . on new work or when resurfacing old floors. Vrite for further information.



FOR INTEGRALLY COLORED CONCRETE FLOORS

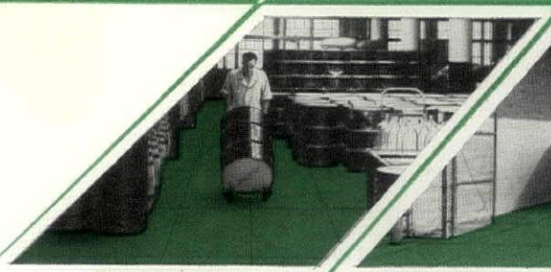
COLORUNDUM

A.C. HORN COMPANY, INC.

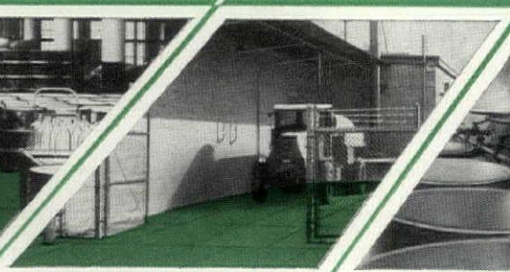
manufacturers of materials for building maintenance and construction

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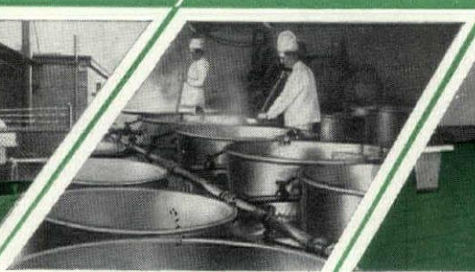
HOUSTON • CHICAGO • LOS ANGELES • SAN FRANCISCO • TORONTO



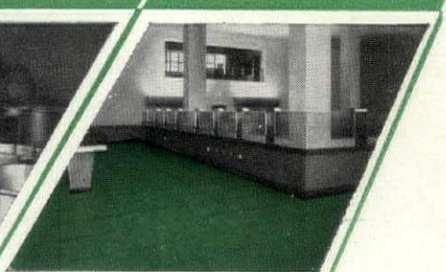
PLANTS



DRIVEWAYS



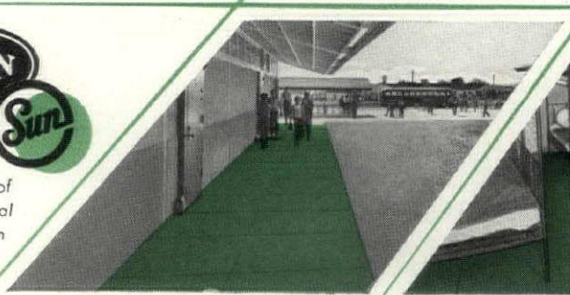
KITCHENS



BANKS

HORN Sun

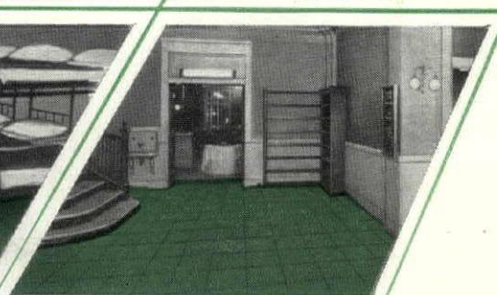
Subsidiary of Sun Chemical Corporation



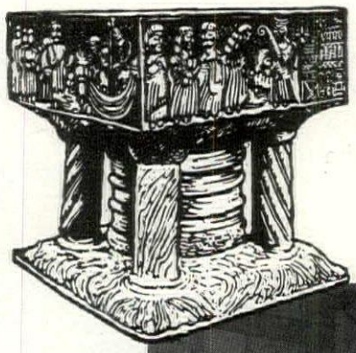
WALKS



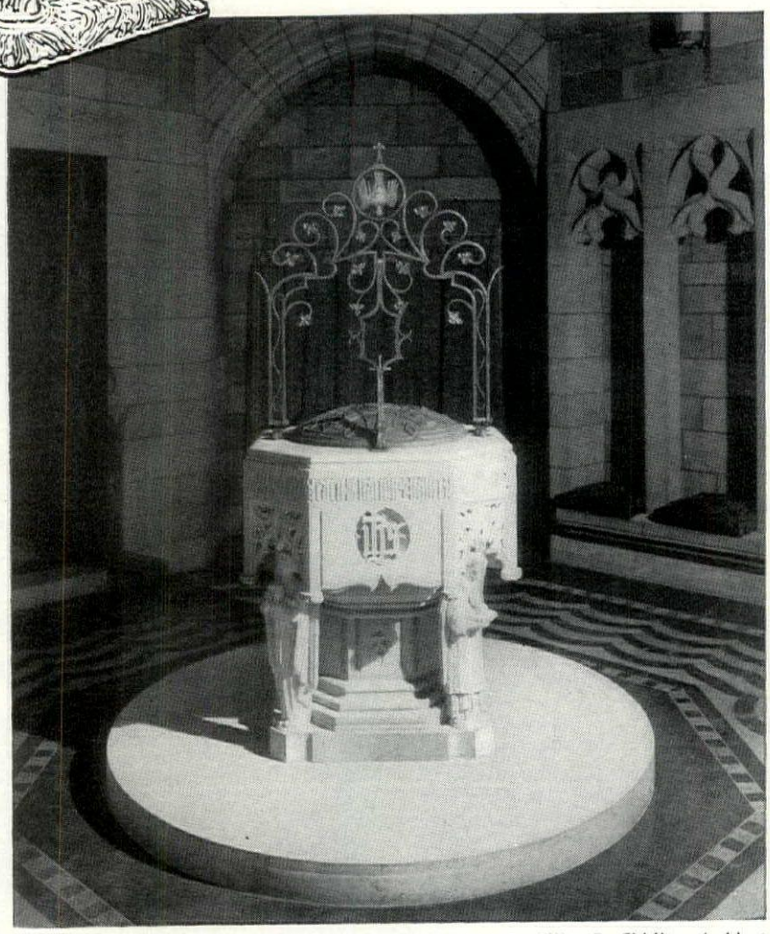
HOSPITALS



LOBBIES



Yesterday's Glory



Baptismal Font, Church of St. Vincent Ferrer, N. Y. C., Elliott L. Chisling, Architect.

Today's Prayer

Marble has sung the glories
of its Creator since the dawn of Christianity.
No other material so appropriately expresses the enduring character of the Church;
none affords so intimate a relationship between the Hand of God and the hand of man.

Marble *retains* its initial beauty. It *proves* the case for propriety of materials.
And it is the simplest to maintain or clean.

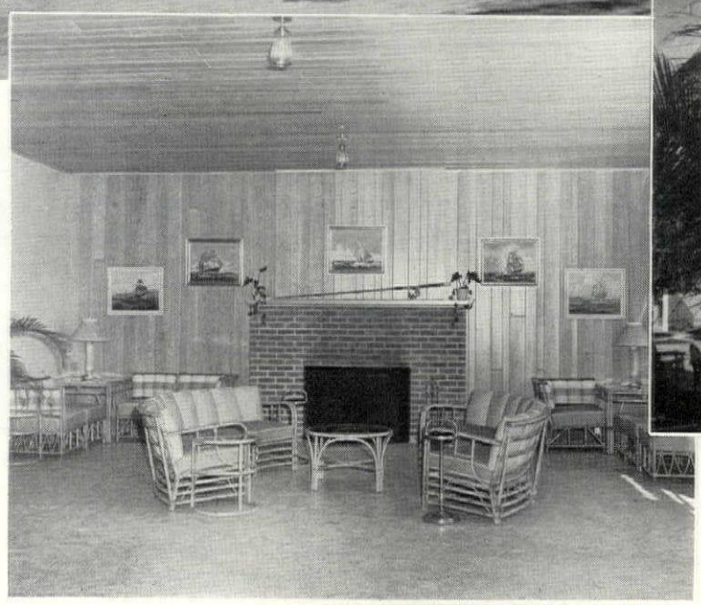
Literature available on request:
"Marble for the Home"
"Marble for the Hospital"
"Stores Modernize with Marble"
"Marble Forecast 1949"

MIA

Marble Institute of America, inc.

108 FORSTER AVENUE, MOUNT VERNON, N. Y.







THE WINDSWEPT HOTEL, VERO BEACH, FLORIDA

STEVENS & SIPPLE, Contractors, Orlando, Fla. · PLAMONDON DECORATING CO., Consultant, Chicago · L. PATTERSON, Painting Contractor, Vero Beach

— ACING directly on the ocean, the Windswept Hotel, Vero Beach, Florida, with its private beach nd salt water swimming pool, is a favorite resort of a scriminating clientele.

In the recent modernizing and remodeling of the Windswept, the designers largely achieved their purpose ith the aid of pleasing wood paneling. One outstanding xample is shown in the above interior where Pratt & ambert Ash Oil Stain and "61" Floor Varnish — Gloss d Satin Finish — were used to beautify the cypress neling. Other Pratt & Lambert paint and varnish oducts also used on the interior included "61" Enamel.

Wherever authoritative decoration is desired with economical maintenance, the Pratt & Lambert Architectural Service Department offers prompt, practical assistance in such planning, regardless of the size of the project.

PRATT & LAMBERT-INC.

Paint & Varnish Makers

1849 — Centennial Year — 1949

NEW YORK · BUFFALO · CHICAGO

FORT ERIE, ONTARIO

Save the surface and you save all!

PRATT & LAMBERT PAINT AND VARNISH

REGISTERED PL TRADE MARK

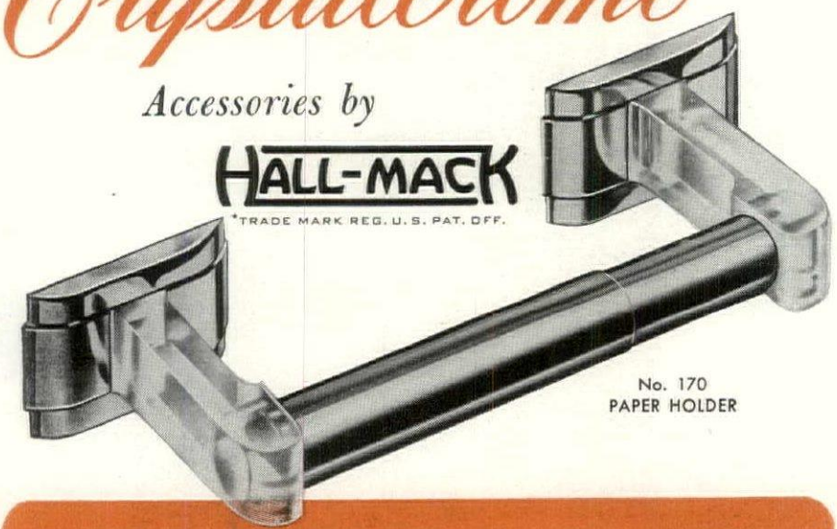
Here's new, breathtaking beauty for bathrooms

Crystalcrome*

Accessories by

HALL-MACK

*TRADE MARK REG. U. S. PAT. OFF.



No. 170
PAPER HOLDER

NEW in design...NEW in appearance...NEW in its conception of modern accessories for bathrooms—that is Hall-Mack Crystalcrome!

Crystalcrome combines the lasting brilliance of polished chrome on solid forged brass with the added beauty of crystal that is perfectly clear, jewel-like and unbreakable.

Whatever your designs or building requirements may be, Crystalcrome will bring new beauty to bathroom decoration. Moderately priced to cover a wide range of building needs, Crystalcrome is quickly and easily installed. It is an important new addition to the complete Hall-Mack line of bathroom accessories for every application from millionaire's mansion to modest cottage.



No. 165
RECESSED
SOAP AND GRAB

Crystalcrome is available in towel bars, soap dishes, paper holders, toothbrush and tumbler holders and other accessories—in designs never before achieved in bathroom equipment. *Your copy of the Crystalcrome Catalog will be mailed without obligation on request—write for it today!*



No. 120
SOAP HOLDER

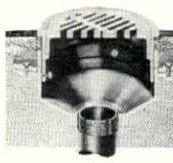


No. 130
TUMBLER AND
TOOTHBRUSH HOLDER

HALL-MACK COMPANY
1344 WEST WASHINGTON BOULEVARD, LOS ANGELES 7, CALIFORNIA
7455 EXCHANGE AVENUE, CHICAGO 49, ILLINOIS

FLOOR DRAINS can be easily adjusted to new floor level

Zurn's new line of Easy-Level Floor Drains permits quic easy adjustment of the drain to new floor levels. Particular suitable for floor installations where resurfacing is require they incorporate a positive adjustment feature which permi the frame and grate to be raised or lowered to desired leve For relocation of the drain, the strainer is loosened from th cement, locating bolts on the frame are unscrewed and th entire frame and grate raised to the new grade. Locating bol are then tightened again. Model Z-507 is designed with special non-tilt supporting ledge for the strainer. Model Z-506 is fitted with an extra-heavy deep-flange strainer and is particularly suited to heavy traffic loads. Both models are of heavy, durable construction. Both are furnished in a complete range of sizes, with heavy duty, dura-coated cast iron body, and integral seepage pan, fran and grate. Clamping collar and calk outlet are optional.



Manufacturer: J. A. Zurn Mfg. Co., Plumbing Div., Dep Z-3, Erie, Pa.

AUTOMATIC CLOTHES WASHER finishes clothes in 30 mi utes, permits selection of water temperature and quantit

The new Hotpoint clothes washer operates automatical through an entire wash, rinse and damp dry cycle at t setting of a dial, or permits any phase of the operation to interrupted, skipped or repeated. It also leaves the selecti of water temperature and quantity to the judgment of t operator. A full tub load of 8 lbs. of clothes requires a ma mum of 16 gals. of hot water. The manufacturer repor however, a complete washing can be done in the new machi with half that amount. Bar, powdered or liquid soap can used, and washing, rinsing and spin drying a full washer lo takes only 30 minutes. The rinsing cycle includes one war spray, one cold spray and a deep overflow which floa residual soap and scum into the drain from the water su face. The new washer features a patented agitator to assu efficient washing with even a small amount of water. A automobile-type fluid drive automatically adjusts the sp drying speed so that bulky items can be washed witho excessive vibration. The new machine measures 25 in. squa matches other Hotpoint counter-height kitchen and hor laundry appliances and is installed without bolting to the flo

Manufacturer: Hotpoint, Inc., 5600 West Taylor St., Chica 44, Ill.

IRONER in fancy wood cabinet is designed for homes wit out kitchen and laundry storage space.

Seeking a new sales market, primarily those who do not ha storage space available for the ironer in either the kitchen or laundry, the Ironrite Co. has introduced a new model in a fancy wood cabinet. Mechanically the same as this company's model 80 or 85 which is designed for use in home kitchens and laundries, the new Cabinette can double as a server in the dinette or as a chest in the hallway, living

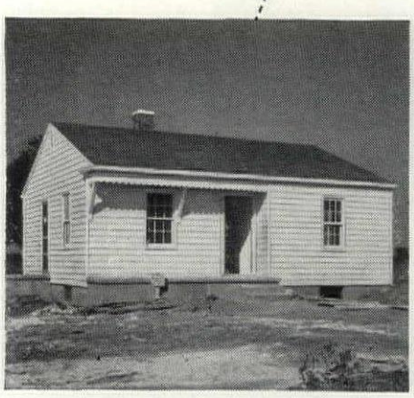


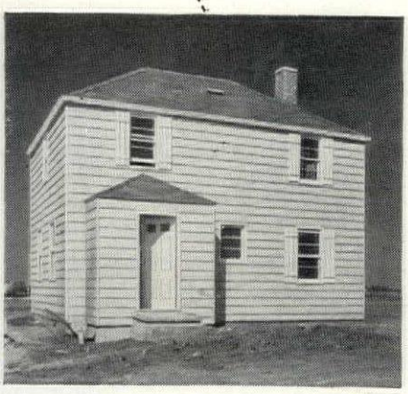
(Continued on page 17



Newton, Iowa

1000-home project uses KIMSUL* insulation throughout!







Builders choose KIMSUL for its Low Cost — High Insulating Efficiency

Pictured here are three of the 35 different styles of houses being built at Newton, Iowa, employing streamlined construction methods devised by Chief Engineer J. Buford Jenkins. This is a 100% site-prefabricated project. Leaders of the non-profit organization financing it, say the houses will sell for $8,000-$10,000. It is expected that 1000 units will be completed within three years—all of them insulated throughout with KIMSUL.

Whether you're building one house or a thousand, investigate first the many advantages of using KIMSUL insulation. For KIMSUL, with a "k" factor of 0.27, is the only many-layer stitched blanket type of insulation—and that means uniform efficiency over every inch of covered area. No thick spots—no thin spots where heat can leak out. What's more, KIMSUL comes in light, handy, compressed rolls, so it's easier and more profitable to install. No need for skilled workmen or expensive machinery. And KIMSUL is the only insulation with the fire-resistant Pyrogard* cover.

For further information, see your distributor, or write for our free booklet covering the latest techniques in the insulation field.

KIMBERLY-CLARK CORPORATION
Neenah, Wisconsin

KIMSUL INSULATION
A PRODUCT OF Kimberly Clark RESEARCH

America's Finest New Homes are insulated with Kimsul!

*T. M. REG. U. S. AND CAN. PAT. OFF.



Andersen Gliding Window Unit in Sam Buron Home, Pine Bend, Minnesota

ANDERSEN Windowalls*

LIVING PICTURE of a rambling river framed in the wall of this comfortable study. The WINDOWALL is a single Andersen Gliding Window Unit. It functions as a window, by opening up the view and by providing an excellent source of ventilation. Simultaneously it functions as a wall, weathertight and proof against the wintry blasts of a Minnesota winter.

Specification data on ANDERSEN WINDOWALLS is in Sweet's Architectural and Builders' Catalogs, or will be sent by us upon request. See your local lumber or millwork dealer for further information.

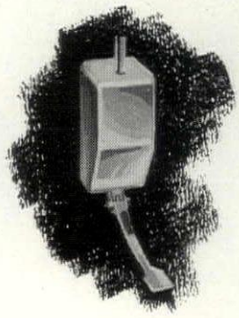
*TRADEMARK OF ANDERSEN CORPORATION

Andersen Corporation

BAYPORT • MINNESOTA



for Any Public Washroom...



Sanitary—and *saving,* too!

A foot pedal on the lavatory, a foot pedal on the closet. They add up to real sanitation in any public washroom—ideal for factories, filling stations, schools.

See how everything is kept off the floor—the most sanitary arrangement—and how it saves on clean-up time!

There's a saving in water, too, with the foot-operated lavatory. No switching from hot water to cold, but a warm, even spray right from the start.

Fixtures shown: the Crane *Oxford* Lavatory, the Crane *Rapidway* Closet.

Get Everything from CRANE

No matter if it's a low-budget job, or a lavish installation—Crane has what you need.

If it calls for a unique style, or for specialized equipment—you'll find it in the broad Crane line.

If you want everything from *one source*—plumbing fixtures, piping, controls, any type of heating—Crane supplies them all.

Thus, you have one high quality throughout. You have the latest in styling, the utmost in dependability—*everything* that goes to make Crane the best-known name in its field.

See your copy of "Crane Service for Architects" for selections from the Crane line—and be sure to check your plans early with your Crane Branch or Crane Wholesaler.

CRANE

COMMERCIAL PLUMBING

CRANE CO., GENERAL OFFICES: 836 S. MICHIGAN AVE., CHICAGO 5

PLUMBING AND HEATING • VALVES • FITTINGS • PIPE

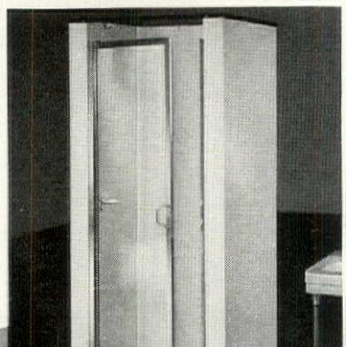
NATION-WIDE SERVICE THROUGH BRANCHES, WHOLESALERS, PLUMBING AND HEATING CONTRACTORS

Modern living . . . . . .

. . . calls for a

Shower Cabinet

in the bathroom



Skipper Shower with Neptune Door

So much personal comfort and satisfaction can be obtained at so low a comparative cost that a shower cabinet has become one of the best values in making homes more desirable to owners and prospective purchasers.

A shower cabinet is a natural companion to the other fixtures in the present day bathroom, and is recognized by architects and builders as one of the strongest features for classifying a home as modern in both the higher priced and lower cost brackets.

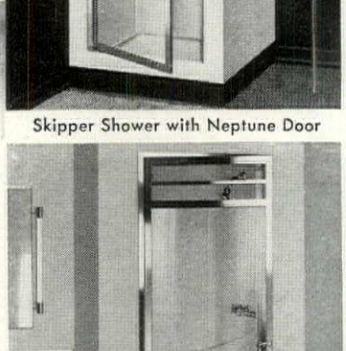
FIAT SHOWER CABINETS

— make houses more saleable.
— make the menfolk happy and are a source of pride to the housewife.
— are in harmony with other modern features in the home that make for easy living.
— add an air of distinction and luxury to the bathroom even when lower priced units are installed.

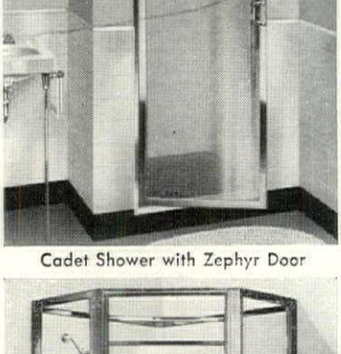
— THERE IS A FIAT SHOWER MODEL TO FIT EVERY BATHROOM —

— the low cost Skipper Shower with Neptune Glass Door.
— the medium priced Cadet Shower with Zephyr Door.
— the highest class shower cabinet ever built, the Commodore, suitable for the finest luxury installation.

A complete catalog with specifications of all Fiat Shower Cabinets is available in Sweet's Architectural File section 24b/1 and Building File section 6a/6 or write for catalog.



Cadet Shower with Zephyr Door



Commodore — 2000-C

Fiat *Metal Manufacturing Company*

CHICAGO 13, ILLINOIS

LONG ISLAND CITY 1, N. Y. LOS ANGELES 33, CALIF.

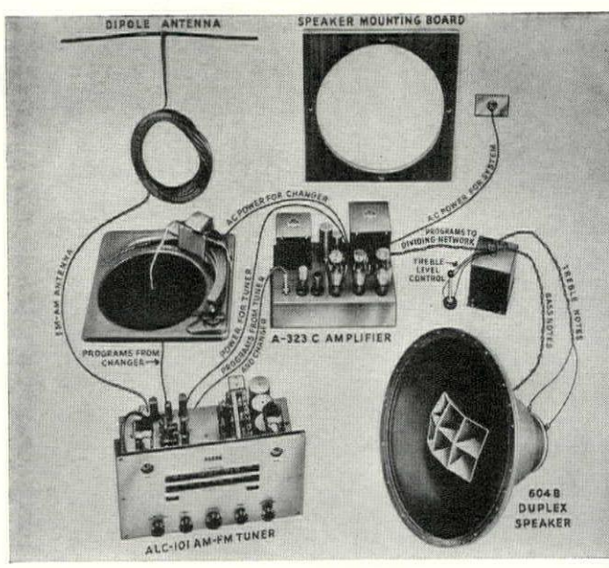
In Canada Fiat Showers are manufactured by Porcelain and Metal Products, Ltd., Orillia, Ont.

room or bedroom. The ironer cabinet is designed to resemble a piece of furniture and is made of imported and domestic hardwoods. It is available in two finishes: brown mahogany and honey blond, and the surfaces of both are water and moisture resistant. When closed the cabinet measures 32 in. wide, 37 in. high and 20½ in. deep. When in use it measures 49½ in. wide, 41½ in. high and 39½ in. deep. The new ironer, with all the operating features of Model 80 and 85, sells for $30 more than the kitchen model, or in most sections of the country for about $249.95.

Manufacturer: The Ironrite Ironer Co., 332 Cass Ave., Mt. Clemens, Mich.

RADIO-PHONOGRAPH EQUIPMENT features duplex speaker covering frequencies from 35 to 16,000 cycles.

Altec Lansing, long manufacturers of sound equipment for theaters, has entered the residential field with custom-built music systems that are distributed through their many dealers. The typical system is in four parts; speaker, amplifier, AM and FM radio tuner made by Altec and turntable and record changer made by Webster. According to Altec, the most important component of any fine sound system is the loud speaker. Their 16 in. speaker reproduces sound frequencies from 35 to 16,000 cycles by using a two-way multicellular sound source. The splayed high frequency horn rides piggy back within the low frequency horn as shown in the illustra-



tion, carrying frequencies from 2,000 to the limits of human audibility. The larger, low frequency horn is of the conventional type and carries low frequencies up to 2,000. The duplex speaker is equipped with Alnico magnets of the center core type which make it possible to concentrate 100 per cent of the magnet energy of the voice call. This makes for an exceptionally efficient speaker and for "clean" reproduction. Like Voice & Vision, who distribute Altec Lansing equipment (see FORUM Nov. 1948), the manufacturer is very much concerned over location and installation of equipment. Regardless of size or shape of a room, Altec maintains that the speaker should be about 4 or 5 ft. from the floor with the natural dispersion angle of the multicellular (high frequency) horn located to cover that part of the room in which people are usually seated. The primary consideration in speaker installation, however, is to provide a radiation space *behind* it of at least 9 cu. ft

(Continued on page 180)

Over a Million Square Feet of Roofing

- and it's all

KOPPERS!

Stuyvesant Town, Peter Cooper Village and Riverton Houses—the tremendous construction project launched by the Metropolitan Life Insurance Company—will house more than 30,000 people.

And Metropolitan used Koppers Roofing Materials to the extent of 1,030,000 square feet. No haphazard selection, either — because Koppers Built-Up Roofs stand up under the most severe conditions. In fact, it's a rule rather than the exception for Koppers Roofs to give more than 20 years' cost-free service.

To learn the many advantages of using Koppers Roofing Materials, see your contractor; or write directly to Koppers for full information.

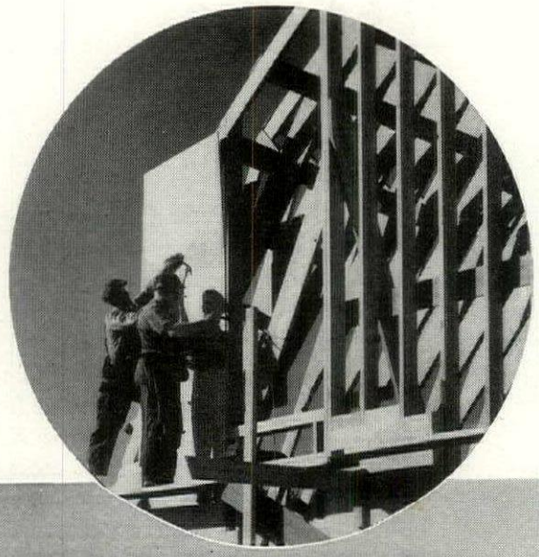
KOPPERS COMPANY, INC. • Pittsburgh 19, Pa.



Aerial Photograph: Stuyvesant Town, Peter Cooper Village and Riverton. Owner: Metropolitan Life Insurance Co. Architect: Irwin Clavan—Board of Design of the Metropolitan Life Insurance Co. General Contractor: Starrett Bros. and Eken, Inc. Roofer: Tuttle Roofing Co.

KOPPERS

• SPECIFY KOPPERS FOR LONG-LIFE ROOFING •



PLYSCORD cuts building time and costs. The large, light panels cover big areas fast and require fewer fastenings. Contractors report 50% saving in time when using PlyScord for subflooring . . . even greater savings when the panels are used for roof decking and wall sheathing. Homes built with PlyScord are tighter and warmer, as well as stronger and more rigid.

Walls are Stronger—More Rigid, When Sheathed with PLYSCORD

Here's how government tests at U. S. Forest Products laboratory rank the relative strength and rigidity of various sheathing materials on walls with openings:

STRENGTH AND RIGIDITY OF FRAME WALLS
From U. S. Forest Products Laboratory Tests Wall with Openings

Sheathing Material	Relative Rigidity	Relative Strength
1x8" DIAGONAL SHEATHING	1.0	1.3
29/32" FIBERBOARD	1.6	2.1
HORIZONTAL with LET-IN BRACES	1.5	2.2
1/4" PLYWOOD NAILED	2.0	2.8
1/4" PLYWOOD GLUED TO FRAME	3.7	4.0

PLYSCORD—the unsanded sheathing grade of Interior-type Douglas fir plywood—contributes to better building in scores of ways.

PlyScord adds rigidity and strength to wall construction when used as sheathing. PlyScord is an ideal roof sheathing, too—suitable for any type of finish roofing. As subflooring, PlyScord provides a rigid, sturdy base for finish flooring, insulates, protects against drafts from below. PlyScord serves as a one-use concrete form panel as well; after form use, the panels are re-used as sheathing or subflooring—an added construction economy.

For details on PlyScord use and application, see Sweet's File, Architectural, or write for the new 1949 Basic Plywood Catalog. Also available is a new booklet, "The Wood of 1,000 Uses". Douglas Fir Plywood Association, Tacoma 2, Washington.

INTERIOR-TYPE
GENUINE
Douglas Fir Plywood
PLYSCORD
GRADE C-D
SHEATHING
D.F.P.A.
INSPECTED

PLYSCORD — identified by this "grade-trade-mark"—is the sheathing grade of Interior-type Douglas fir plywood, manufactured in strict accordance with U. S. Commercial Standard CS45-48. It has a face panel of C veneer and a back panel of D veneer. Plys are bonded with highly water-resistant (but not waterproof) glues; the material will withstand occasional wetting such as might ordinarily be encountered during construction.

PlyScord Thicknesses: 5/16", 3/8", 1/2", 5/8".
PlyScord Lengths: 96", 108", 120", 144".
PlyScord Width: 48".

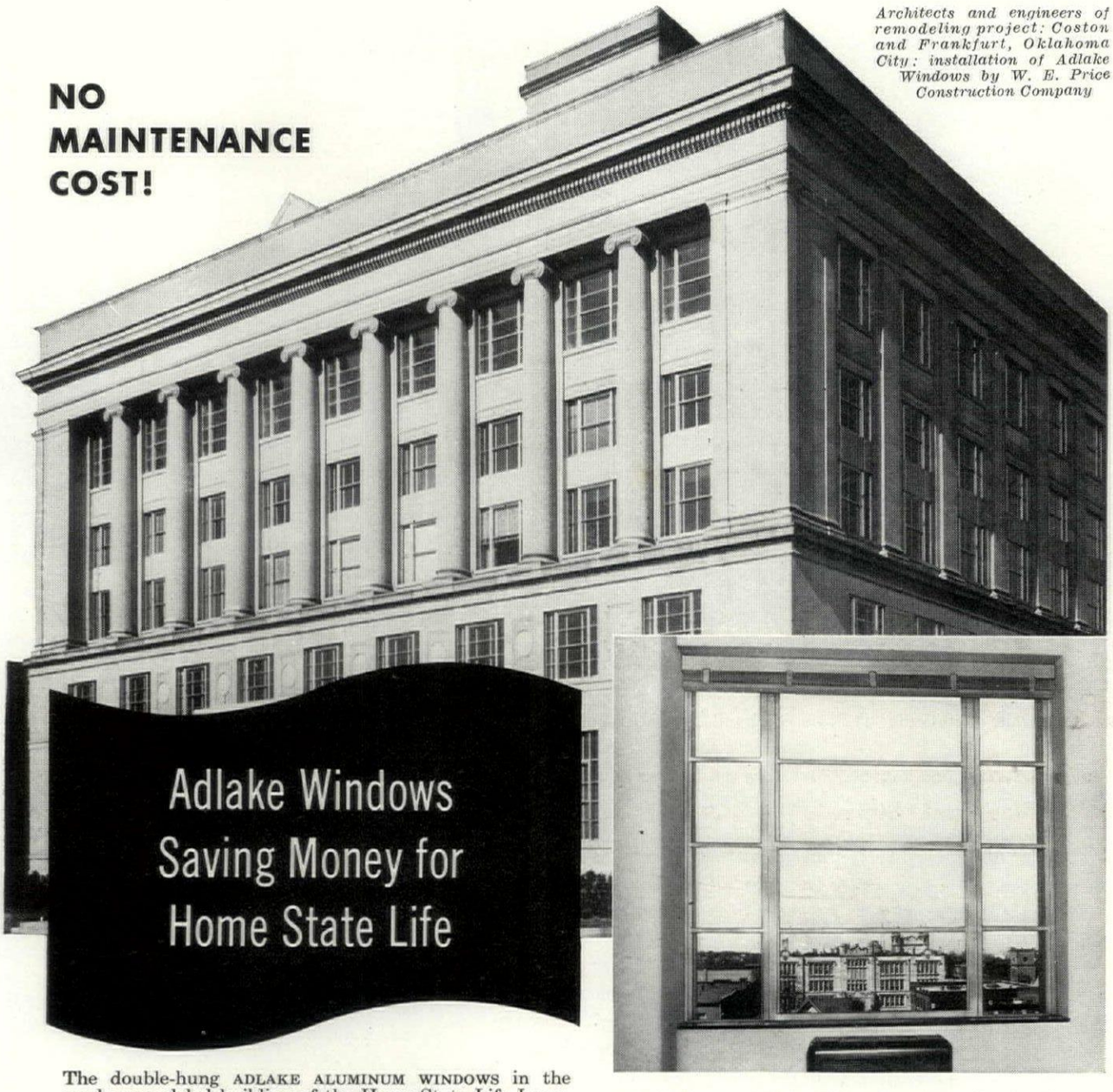
Douglas Fir PLYWOOD
LARGE, LIGHT, STRONG



Real Wood **Panels**

NO MAINTENANCE COST!

Architects and engineers of remodeling project: Coston and Frankfurt, Oklahoma City; installation of Adlake Windows by W. E. Price Construction Company



Adlake Windows Saving Money for Home State Life

(92"x80") Series 800 Adlake Aluminum Window frames a view of Oklahoma City in the remodeled building of the Home State Life Insurance Co. Prior windows were of wood. New windows are "the talk of the tenants," says Home State Life President.

The double-hung ADLAKE ALUMINUM WINDOWS in the newly remodeled building of the Home State Life Insurance Co., Oklahoma City, will save the company a considerable sum, over a period of years, through *eliminating* maintenance costs. The windows will ultimately *pay for themselves* through this economy. Adlake Windows require no painting, no maintenance other than routine washing. And they *last as long as the building!*

Says Mr. Joe D. Morse, President of Home State Life: "These windows, very much to my surprise, are probably the cheapest addition we made to the building . . . I don't think there is a man in our organization who wouldn't write a most complimentary endorsement of these windows."

Further advantages of Adlake Windows are: minimum air infiltration; finger-tip control; no warp, rot, rattle or stick; no maintenance; ease of installation. These are made possible by a unique combination of woven-pile weatherstripping and patented, serrated guides.

INFORM YOUR CLIENTS about the wiping out of maintenance costs, and the long, worry-free service they can expect from Adlake Windows. For complete data, drop us a post card today at 1101 North Michigan Avenue, Elkhart, Indiana. No obligation, of course.

THE

Adams & Westlake

COMPANY

Established 1857 • ELKHART, INDIANA • New York • Chicago

Adlake TRADE MARK

Furnishers of Windows to the Transportation Industry for over 30 years

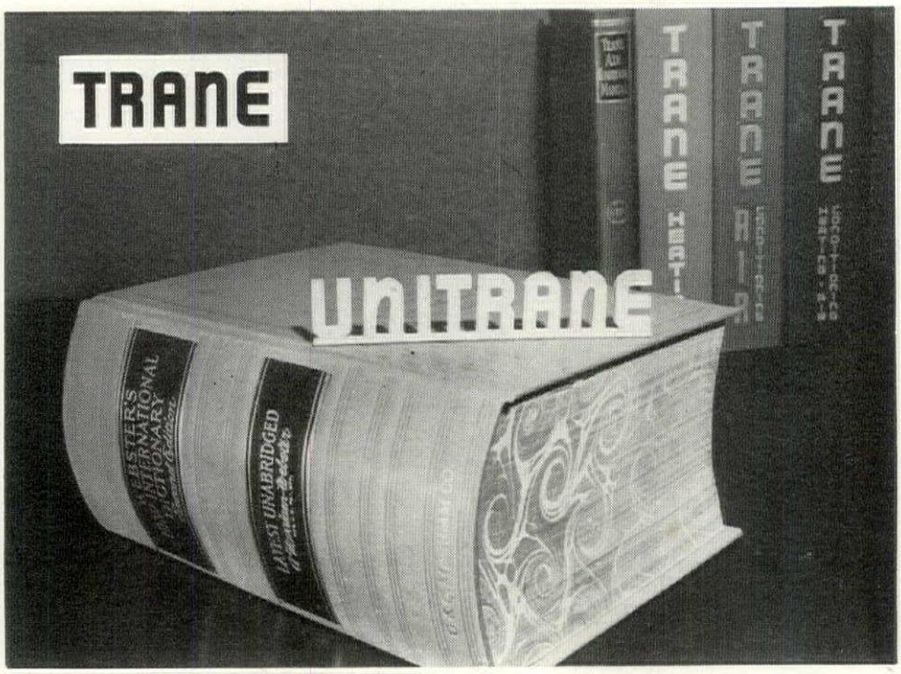
All Adlake double-hung windows carry this seal

SPECIFICATION DH-A1 QUALITY SEAL SPECIFICATION DH-A1

An equivalent of this window has been examined by PITTSBURGH TESTING LABORATORY, conforms in Materials, Construction, Strength of Sections and Air infiltration requirements to ALUMINUM WINDOW MANUFACTURERS ASSOCIATION Specification DH-A1

MEMBER, ALUMINUM WINDOW MANUFACTURERS ASSOCIATION

COPYRIGHT 1946 BY THE ALUMINUM WINDOW MANUFACTURERS ASSOCIATION



Air Conditioning–Unabridged

The new name for air conditioning is UniTrane. It's too new for the dictionary—but it does have one important feature in common with the big Merriam-Webster book: both are complete—*unabridged.*

UniTrane is not merely a new system. It is a new kind of air conditioning. And it deserves a new name: It is a *Unit* system. It is a *Trane* system. It is a *UniTrane* system.

UniTrane air conditioning has individual room temperature control, moisture control, ventilation control. Filtered air. All *without* ducts.

It is designed for big buildings with small rooms. Office buildings. Hotels. Hospitals.

Type MC UniTrane units have *two* circuits in one cabinet. One circuit controls ventilation and moisture. The other circuit controls room temperature. The two circuits work together, but they are independently adjustable. There is no other system like it.

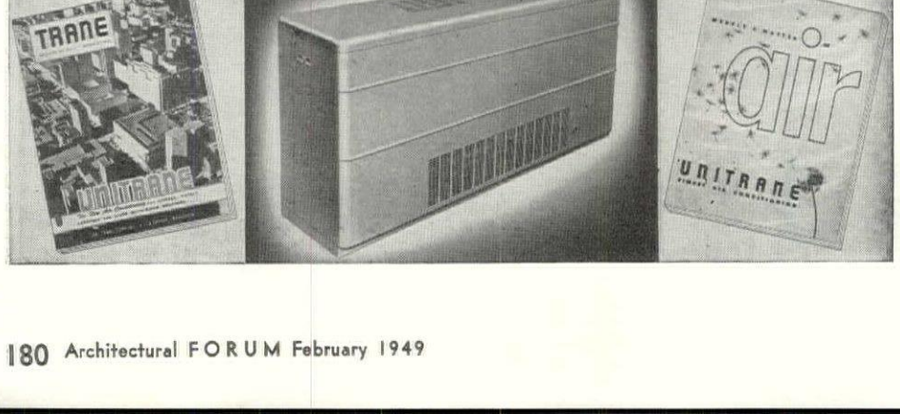
And no ducts! Just simple piping, like a hot water heating system. You circulate hot water in winter, chilled water in the summer. It's as simple as that.

Read "Merely a Matter of Air" for non-technical information about UniTrane. See Bulletin DS-420 for professional data. The Trane sales office in your area is ready to tell you many interesting things about UniTrane—Air Conditioning, unabridged.

THE TRANE COMPANY . . . LA CROSSE, WIS.

Manufacturing Engineers of Heating, Ventilating and Air Conditioning Equipment—Unit Heaters, Convector-radiators, Heating and Cooling Coils, Fans, Compressors, Air Conditioners, Unit Ventilators, Special Heat Exchange Equipment, Steam and Hot Water Heating Specialties. IN CANADA, TRANE COMPANY OF CANADA, LTD., TORONTO.

This Type MC UniTrane Room Unit is beautifully styled for underwindow installation in offices, hotels, hospitals, and other multi-room buildings. Each room has its own temperature, moisture, and ventilation control . . . Data bulletin DS-420 is for architects and engineers . . . "Merely a Matter of Air" is an interesting non-technical discussion of multi-room air conditioning.



and preferably more than this. In addition, the cavity shoul be provided with some sound absorbing material. An excellen place for the speakers in many homes according to Alte Lansing is on the back of a clothes closet door. Here, th clothes stored in the closet absorb the sound. The utility o the closet may not be impaired, since the equipment require little space.



Altec Lansing systems compare favorably in price with other fine radio equipment. The complete system with a duplex speaker lists for $785 including delivery and reasonable installation. If installation is of a complicated nature, costs will be higher. Net price for the system is $585 (over-the-counter). A large part of this cost is accounted for in the duplex speaker itself, which lists at $175.50. Other Altec systems with less expensive speakers are available with the lowest cost speaker, an 8 in. dia-cone, listed at $18; this is not duplex speaker. Because of the sensitivity of Altec speaker the company does not recommend use of a standard LP recor attachment on the record changer. Instead, a large slow-spee transcription turntable is recommended.

Manufacturer: Altec Lansing Corp., 161 Sixth Ave., Ne York 13, N. Y.

TRANSPARENT COATING protects and preserves drawing and blueprints.

A transparent plastic coating that is sold in a self-containe compact sprayer for easy application, Krylon provides durable protective coating for drawings, tracings, blueprint maps and photographs. By merely pressing a button on to of the can the user can apply a fine spray of colorless plasti that will be held by practically any surface. It dries in le than a minute and furnishes a clear satin finish that retai the flexibility of the material on which it is applied. Th new coating is reported to have outstanding resistance t discoloration at high temperatures, water, alcohol, alkal acids, mineral oils, grease and chemical fumes. It also pe mits dirt and smudges to be easily washed off treated dra ings with soap and water.

Manufacturer: Foster & Kester Co., Inc., Philadelphia, P

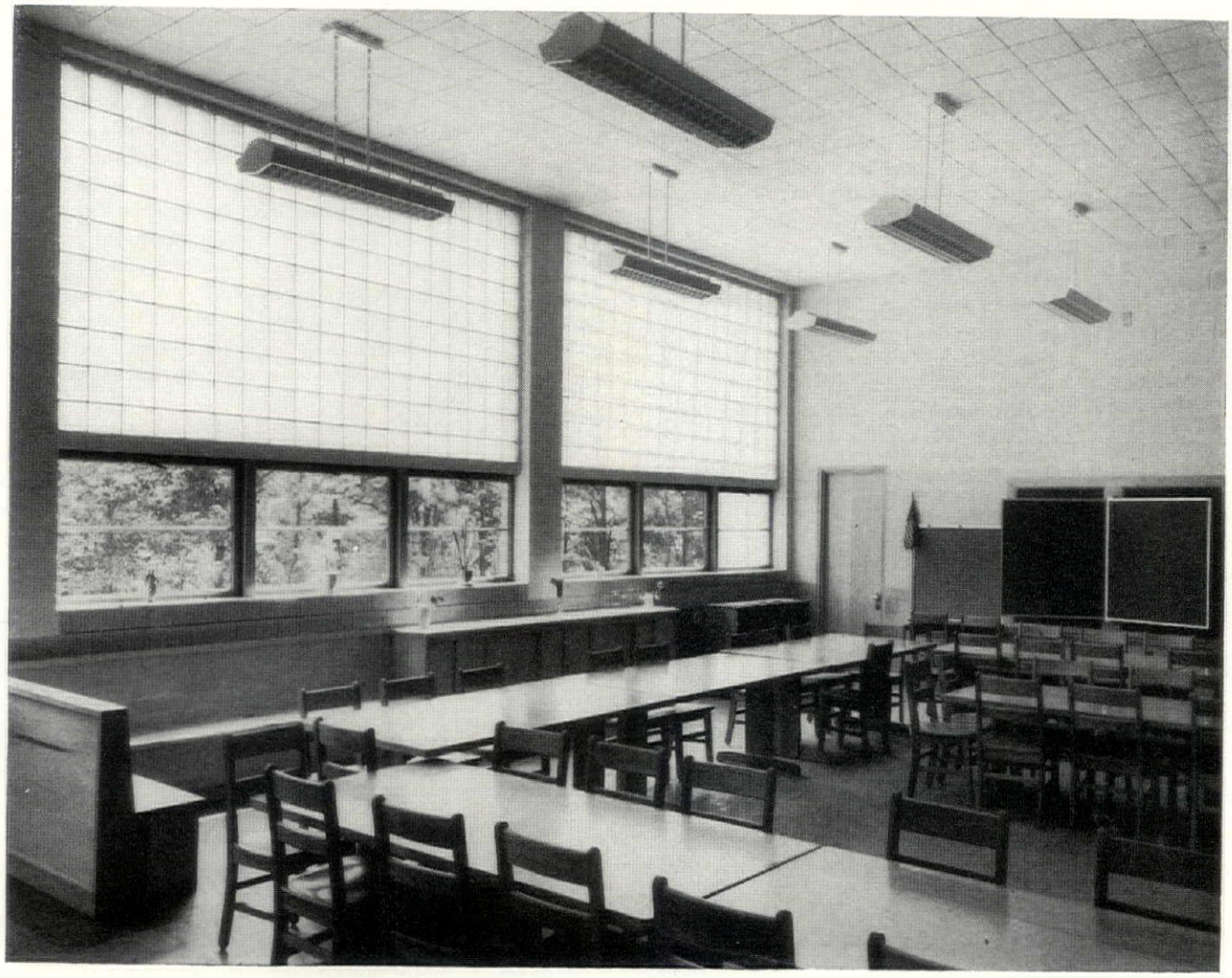
CALCULATING WRIST WATCH has accurate slide rule bui around the dial.

In addition to a fine 17 jewel Swiss movement, the Juveni "Arithmo" features a precision, circular slide rule bui around its dial. The slide index is automatically controlled. All figures to be read are always in their normal positions and all results are always found in the same place. The "Arithmo" sells for $100 in polished stainless steel, or for $300 in 18 Karat gold.



Distributor: Junevia Watch Agency, 604 Fifth Ave., Ne York, N. Y.

(Technical Literature, page 182



Directed light for better sight...

...in this Southeast-facing classroom of the Landover Hills Elementary School, Landover Hills, Maryland. Architects Paul H. Kea Associates, of Hyattsville, Md., used PC Soft-Lite Prism B Glass Blocks to assure that young eyes would be protected. The all-glass units direct the daylight to a high reflectance ceiling from where it is diffused downward on students' tables throughout the room. Brightness ratio of panels to adjacent surfaces in room, even on the sunniest days, is entirely acceptable. This diffused, clear, daylight helps safeguard students' health and efficiency. PC Glass Blocks effectively reduce harmful glare; keep out dust, grit and dirt. And because of their *hollow* construction they have twice the insulating value of ordinary single-glazing. This means a sizable saving in heating and air-conditioning costs as well as greater indoor comfort in cold weather. When you design, design with PC Glass Blocks—whether for public or commercial buildings; for plants or residences. Meanwhile, send for our free booklet on PC *Functional* Glass Blocks.

PITTSBURGH ® PC CORNING

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The mark of a modern building

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Pittsburgh 22, Pa.

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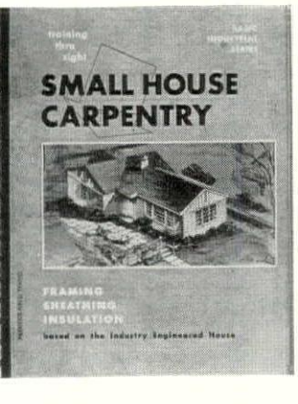
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Distributed by Pittsburgh Plate Glass Company; by W. P. Fuller & Co. on the Pacific Coast, and by Hobbs Glass Ltd. in Canada

TECHNICAL LITERATURE



CONSTRUCTION. Small House Carpentry. By Training-Thru-Sight Associates: Lee Frankl. Prentice-Hall, Inc. 70 Fifth Ave., New York 11, N. Y. 8½ x 11 in. 100 pp. Price $2.95.

This book describes and illustrates the simpler aspects of framing, sheathing and insulating a small frame house. The presentation is based on successful visual training techniques developed in recent years. Text is simple and clear, and has been coordinated with many illustrations in a carefully integrated work. The book deals with specific problems encountered in building one particular house. Any general information about other types of construction is subordinated to the job in view; that of building a specific house. The house chosen is from a design by the Industry Engineered Homes Program sponsored by The Producers Council, Inc. and the National Retail Lumber Dealers Association. Program houses are designed for the tastes and budgets of the average citizen and are specifically designed to take advantage of the latest developments in manufactured building materials.

Construction methods specified cut the material and labor costs of the average builder to a minimum. The authors begin with a section on selection of materials telling about the importance of well seasoned lumber and explaining the lumber grading system in use today. Nominal and actual sizes of lumber are given as well as recommended nail sizes. The section includes drawings of various available window types. The next two sections describe how to build a tool and material shed for the job and explains where anchor bolts for stairways, bearing posts and sills are located, in relation to the finished basement. Quantity and proper sizes for various framing members up to and including the roof are then described. A simple and concise description of stair framing, minimum and maximum riser heights and tread widths is included in this section. The book then goes on to describe the sheathing and flooring operations and proper installation of various types of insulation. Section 5 deals with three common types of framing: braced, balloon and platform. The Industry Engineered house is platform framed. Section 6 is devoted to power tools that can be used to good advantage in the building of this particular house. The last section is a series of four accordion fold pull-out plates of Industry Engineered house plans.



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EXHAUST SYSTEMS. Design of Industrial Exhaust Systems by John L. Alden. Second Edition. The Industrial Press, 1 Lafayette St., New York 13, N. Y. 252 pp. 5¾ x 8¾ in. Price $3.5

Because the art of ventilation has grown greatly since th original edition of *Design of Industrial Exhaust Systems* 1939, the author has completely revised and added new cha ters to this second edition. The treatise covers modern exhau ventilation, low-pressure pneumatic conveying, the design hoods, piping and structural details, and the selection of du separators, centrifugal and axial-flow exhaust fans. Primaril it explains how to design, build or buy an exhaust system th will remove dust, shavings, fumes, etc., so as to meet th requirements of law or industrial hygiene.

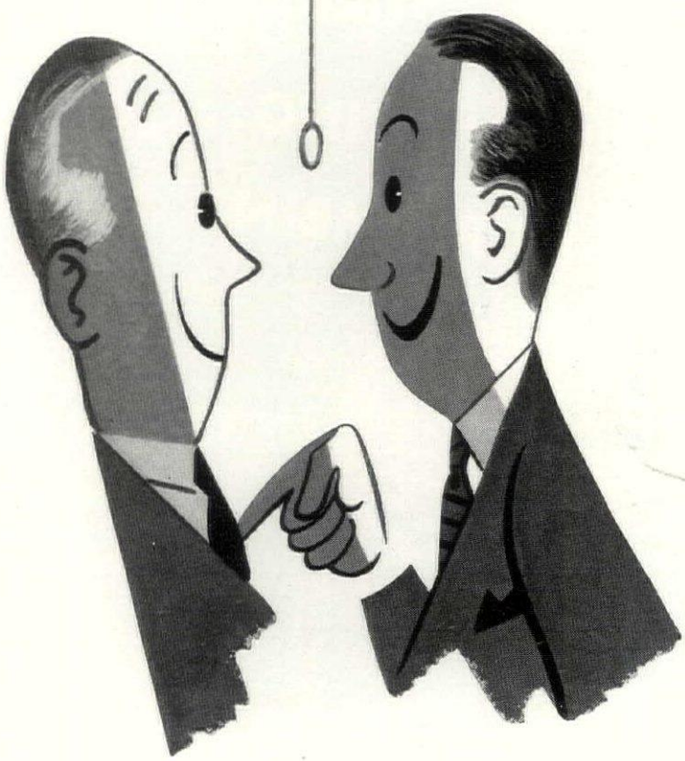
TREATED LUMBER. Service Records for "Wolmanized Treated Lumber. American Lumber & Treating Co., 332 Sou Michigan Ave., Chicago, Ill. 36 pp. 6 x 9 in.

Service records on installations of "Wolmanized" treate wood have been brought up to date and summarized in th new report by the technical department of the American Lu ber & Treating Co. Supplementing the 1941 case history fi which presented the results of inspections of 21,475,075 bd. of "Wolmanized" treated lumber, this second publicati comprises recent re-inspection results for over 92 per ce of the original footage, plus results on recent additional insta lations. Detailed files on such varied classes of installations wet-process factories, railroad structures, bridges, mine refrigerated buildings, water works and stadiums show th less than one-half of one per cent of all the lumber cover by the records has failed because of decay or insect attac

INSULATION. Simplified Physics of Thermal Insulation Alexander Schwartz. Infra Insulation, Inc., 10 Murray St., N York, N. Y. 32 pp. 8½ x 10 13/16 in.

This revised edition of *Simplified Physics of Thermal Insu tion*, in addition to featuring Infra Insulation, contains bri but factual information on a *(Continued on page 18*

"and believe it or not ROOM-DARKENING too!"



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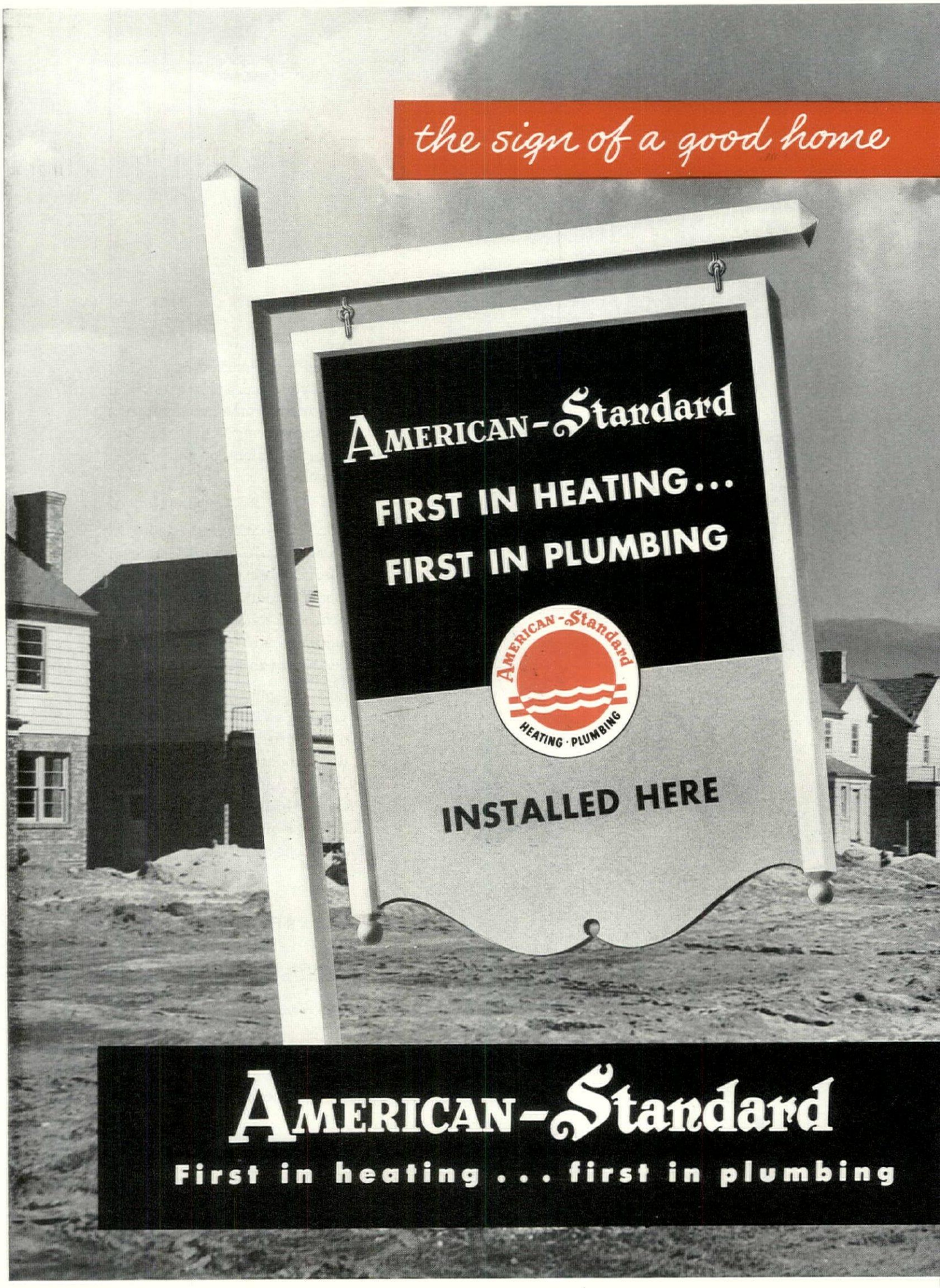
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More American homes have heating and plumbing by American-Standard than by any other single company.



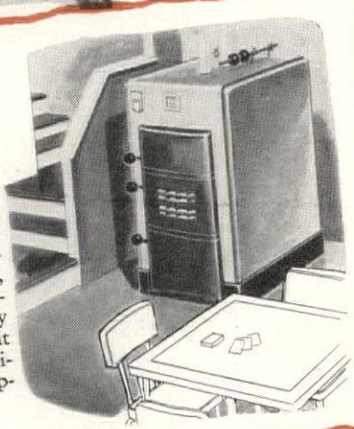


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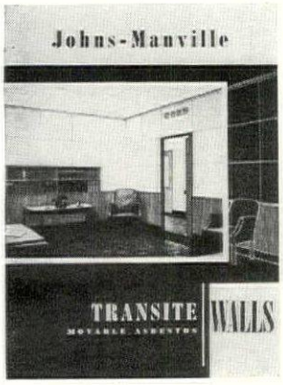
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TECHNICAL LITERATURE



number of subjects, including heat transfer, conduction and density, radiation and rejection, reflection, condensation, humidity, vapor and radiant heating systems. There is also a discussion of insulating with various kinds of materials, including mass fibrous insulation and reflective types, and information on how and where to use metallic foils. Numerous charts and diagrams amplify the text. The Chart of Thermal Insulation Values, a feature of the 1947 edition of this manual, has been retained and revised.

MOVABLE WALLS. Transite Movable Asbestos Walls. Johns-Manville, 22 E. 40th St., New York, N. Y. 24 pp. 8½ x 11 in.

This new Johns-Manville booklet furnishes latest information on Transite Movable Asbestos Walls, movable partitions for commercial, industrial and institutional buildings which can be shifted to meet changing conditions. Construction drawings show cross sections of the units and demonstrate how they are erected. Photographs illustrate numerous installations.



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The exterior beauty of windows is preserved by ROLSCREENS because they are made of neutral colored AluminA wire cloth and installed on the **inside.** ROLSCREENS cost no more than good quality flat-frame screens. When annual maintenance and labor costs are considered, ROLSCREENS actually cost less than ordinary screens.

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WALLBOARDS. Color—Charm With Miracle Walls by Tylac. Tylac Co., Monticello, Ill. 8 pp. 8½ x 11 in.

The four designs in which Tylac wall paneling is available and the 18 preferred colors in this wallboard line are colorfully presented in this brochure. Other sections give general information on panel sizes, uses and installation of Tylac, as well as data on three types of Presdwood molding patterns and three types of metal trim.

GLASS BLOCKS. Make The Most of Daylight With PC Functional Glass Blocks. Pittsburgh Corning Corp., 632 Duquesne Way, Pittsburgh 22, Pa. 16 pp. 8½ x 11 in.

This brochure could well be renamed "The Control of Natural Daylight Through The Use of Functional Glass Block Fenestration." Featuring the PC Nomograph for estimating illumination levels, the work gives detailed instructions for selecting the right pattern of glass block for a wide variety of daylighting needs. Main sections of the book cover: daylight control, types of functional blocks and their uses, brightness data, light transmission and distribution. Other sections include technical data on the blocks, and illustrations of typical glass block installations.

GLASS-PLASTIC PANELS. Facts About Prest-Glass. The Prest-Glass Corp., 8 E. 12th St., New York, N. Y. 10 pp. 11 x 8 in.

Facts About Prest-Glass, featuring the new colorful, corrugated panels made of Fiberglas and plastic, is an excellent example of graphic persuasion. Drawings and brief text readily explain the material's features: light-weight strength, flexibility, permanence and easy maintenance and handling. Photographs and caption indicate the simplicity of application. The sizes, colors and finishes in which Prest-Glass is available and suggestions for its unlimited use are listed on closing pages. Carter Winter designed the booklet.

PLASTIC. Plexiglas For Store Modernization. Rohm & Haas Co., Washington Square, Philadelphia 5, Pa. 16 pp. 8½ x 11 in.

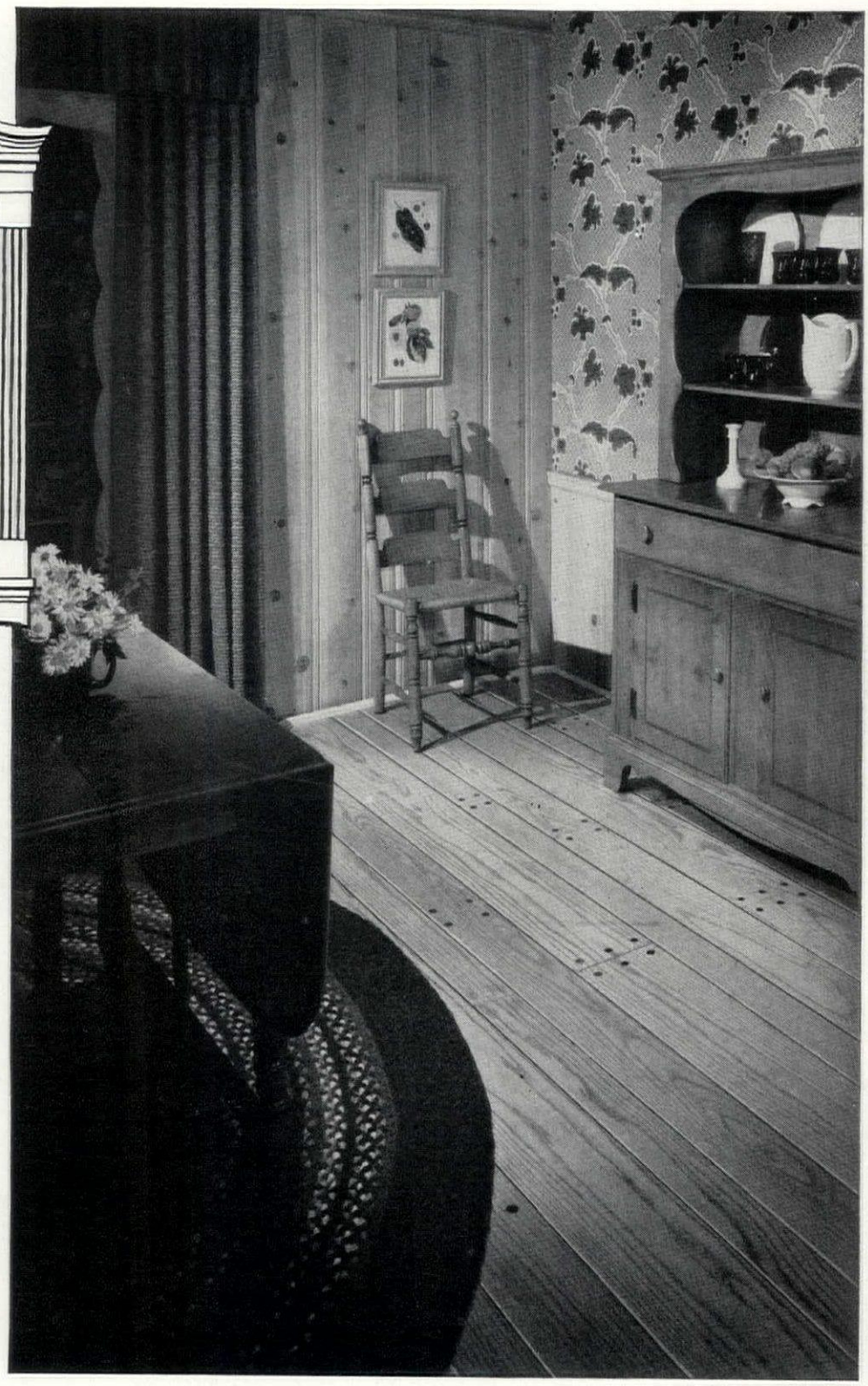
This pictorial presentation shows how store architects and display directors in all parts of the country have used flat, corrugated and patterned sheets of clear and colored Plexiglas plastic to carry out new ideas in store planning. Typical installations illustrated include: showcases, partitions, panels, staircase balustrades, lighting fixtures, facades, signs, transparent merchandise drawers and free-standing display cases.

TRANSPARENT MIRRORS. Transparent Mirrors and Front Surface Mirrors. Libbey-Owens-Ford Glass Co., Nicholas Bldg., Toledo 3, Ohio. 4 pp. 8½ x 11 in.

The various uses of L.O.F. Transparent Mirrors, which bear the trade name Mirropane, and L.O.F. Front Surface Mirrors are described in this interesting folder. For those unfamiliar with transparent mirrors, they resemble a conventional mirror in appearance but have a reflection of approximately 50 per cent. Thus when they are installed between a brightly lighted and a dimly lighted area, they permit an observer in the dimly lighted room to see into the brighter area. One featured use of Mirropane is in entrance doors, *(Continued on page 190)*

For Colonial Charm...1949 Style

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When you seek to create rooms that are strikingly different in style and beauty, specify plank floors—in random widths. Bruce Solid Oak Planks retain all the authentic charm and casual effect of historic plank flooring. Yet they are thoroughly modern in construction and are in keeping with present-day refinements in the home.

Ideally suited to the many variations of Colonial architecture, and to the rambling Ranch types, Bruce Plank Floors are decoratively and historically correct for all traditional styles.

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Consult your Sweet's Catalog File for more information on Bruce Plank Floors. Or write E. L. Bruce Co., Memphis, Tenn.

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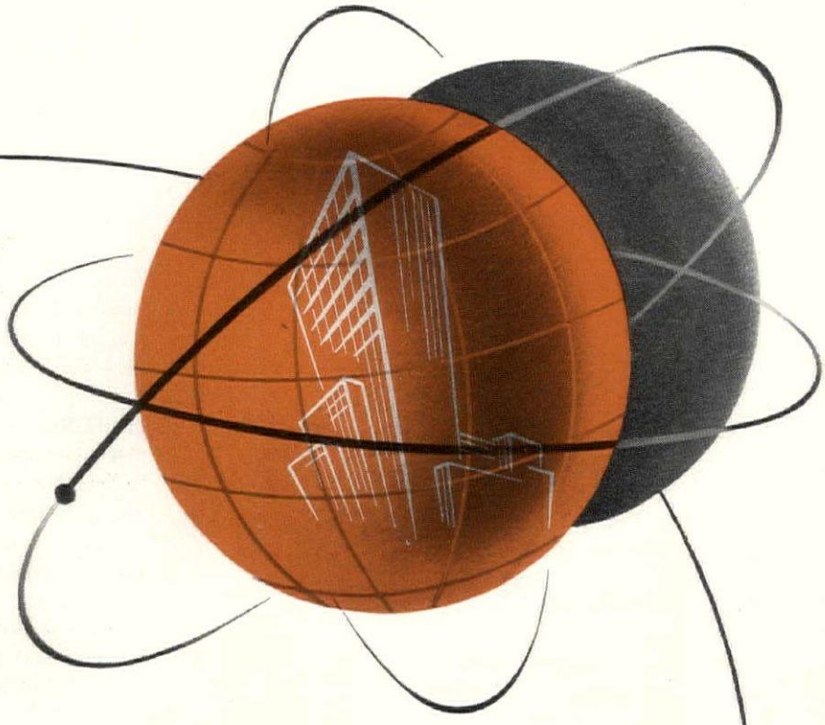
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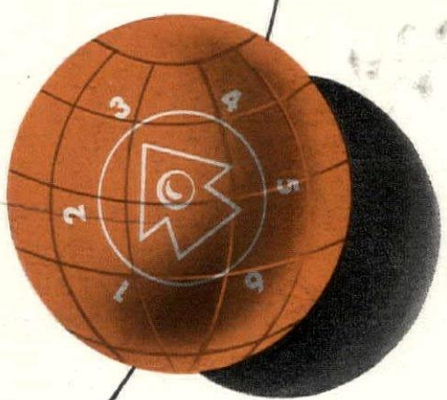


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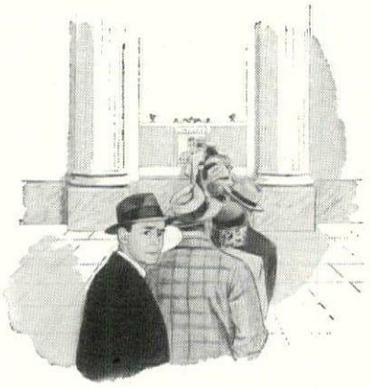
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260 11th Avenue, New York 1, N.Y.



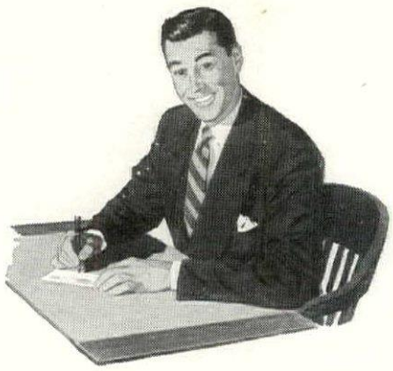


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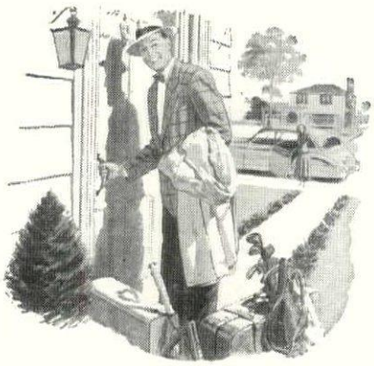


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TECHNICAL LITERATURE

another in display boxes in food stores and for full walls. brief closing section of the booklet describes L.O.F. Fro Surface Mirrors, which are opaque instead of transparen These mirrors have but a single reflection, rather than th additional reflection obtained from the front surface of th glass in ordinary type mirrors. Used in twin mirror install tions, they create unusual illusions.

LIGHTING. American Standard Practice for School Lightin Illuminating Engineering Society, 51 Madison Ave., New Yor N. Y. 79 pp. 6 x 9 in. Price 50 cents.

This *Standard*, dealing with natural and artificial lightin establishes criteria of good illumination for school classroom Broad in scope and fully illustrated, it contains specific recor mendations concerning: school tasks; quality of illuminatio quantity of illumination; environment; natural and artifici lighting; economic factors. To assure comfortable and ea seeing conditions the work includes specifications as to ma mum fixture brightness and limiting brightness ratios, addition to footcandle tables. To guide in determining visually comfortable interior decorating scheme, recommend reflectance values for desks, floors, wall and ceiling are give Illumination results to be expected from a considerable nu ber of lighting installations, employing both incandescent a fluorescent sources, are indicated. The control and use natural lighting is discussed. This section is amplified wi maps and charts which show the amount of sunshine to expected during the winter school months in various parts the country. The relative merits of various fenestration tec niques and daylight controls, including directional gla blocks and diffusing screens, are also covered.

ELECTRIC PLANTS. Onan Electric Plants, Catalog A-138 D. W. Onan & Sons, Inc., 498 Royalton Ave., Minneapolis, Mi 20 pp. 8½ x 11 in.

Catalogue A-138A covers the complete line of Onan elect plants. Opening with a Model Guide for aiding the rig selection of these generators, it describes Onan units rangi in size from the portable 350 w., 77 lb., Model AAE, to t 35,000 w. Diesel units. It lists other models ranging from 3 to 35,000 w. A.C. in all standard voltages, frequencies a phases as well as direct current models in 115 v. current fr 750 w. to 15,000 w. and in 230 v. current from 2,000 w. 15,000 w. Battery charging plants: 6, 12, 32 and 110 v. fr 300 to 3,500 w. are also included.

REQUESTS FOR LITERATURE

AKRON ART INSTITUTE, 140 East Market St., Akron 8, Ohio.

DAVID J. APPLEBY, Tree Tops, Rose Valley, Brentwood, Ess England.

BERNARD J. FRIEDMAN, architect, 210 N. Church St., Tucson, A

ROGER S. GILBERT, architectural student, 98-09 64th Road, For Hills, Long Island, N. Y.

EUGENE A. GRIFFITHS, architectural student, 1835 F St., Linco Neb.

MCGRAW & CARRERE, 2611 Palm Ave., Manhattan Beach, Calif.

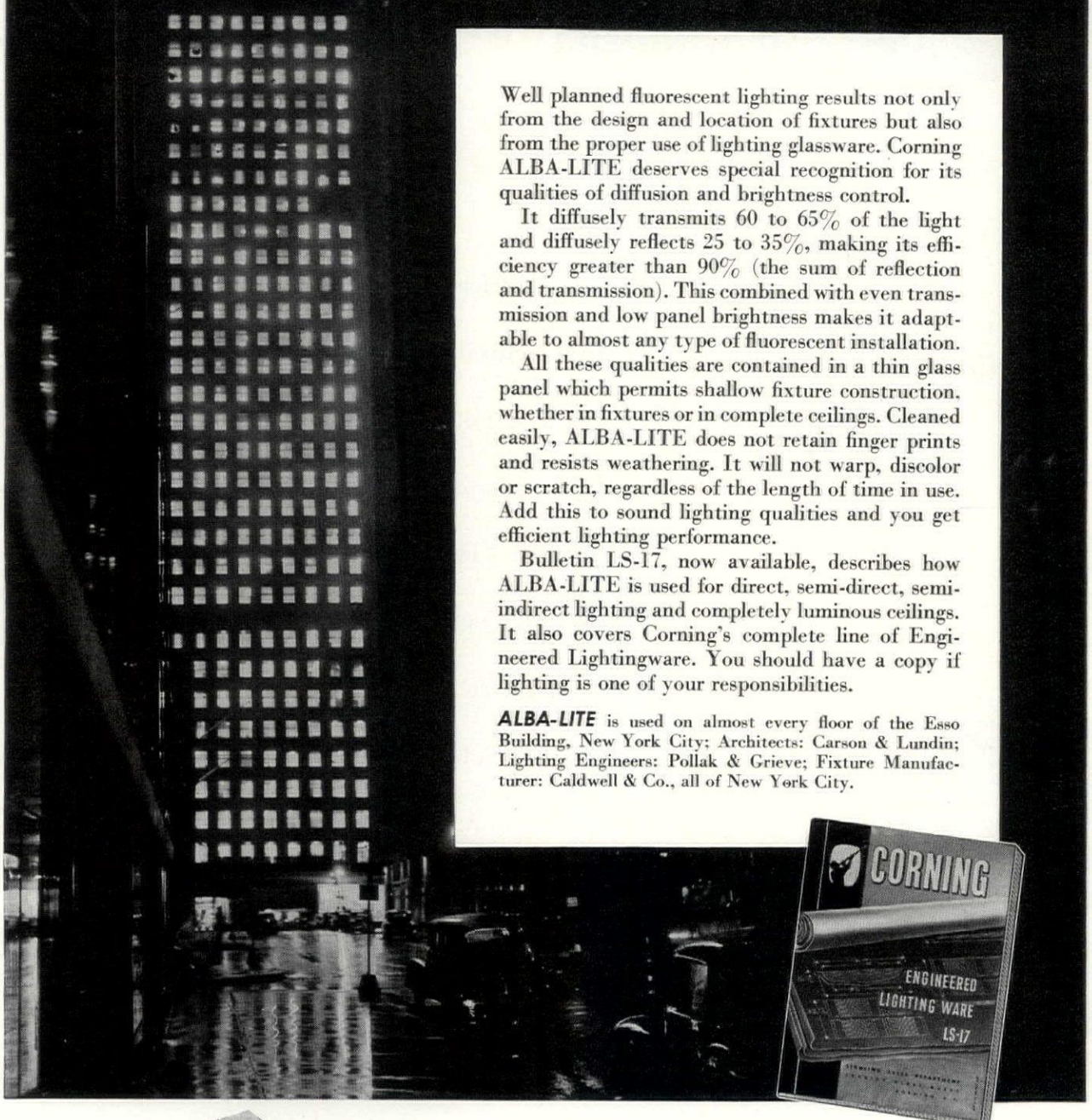
S. LYON NATHANSON, architectural student, 376 Clarke Ave., We mount, Montreal 6, Canada.

THE DEPARTMENT OF ART, Carnegie Hall, University of Mai Orono, Me.

WILLIAM M. UPCHURCH, 608 West Club Blvd., Durham, N. C.

(Continued on page 19

WHY A WELL PLANNED LIGHTING INSTALLATION NEEDS CORNING ALBA-LITE



Well planned fluorescent lighting results not only from the design and location of fixtures but also from the proper use of lighting glassware. Corning ALBA-LITE deserves special recognition for its qualities of diffusion and brightness control.

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Bulletin LS-17, now available, describes how ALBA-LITE is used for direct, semi-direct, semi-indirect lighting and completely luminous ceilings. It also covers Corning's complete line of Engineered Lightingware. You should have a copy if lighting is one of your responsibilities.

ALBA-LITE is used on almost every floor of the Esso Building, New York City; Architects: Carson & Lundin; Lighting Engineers: Pollak & Grieve; Fixture Manufacturer: Caldwell & Co., all of New York City.

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Please send me your Data Book LS-17, "Corning Engineered Lightingware," describing MONA-LITE, ALBA-LITE and other Corning products.

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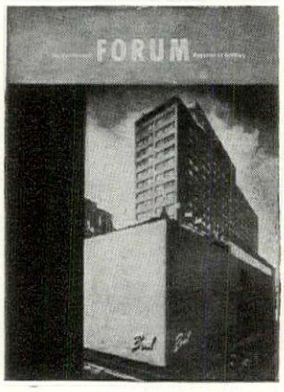
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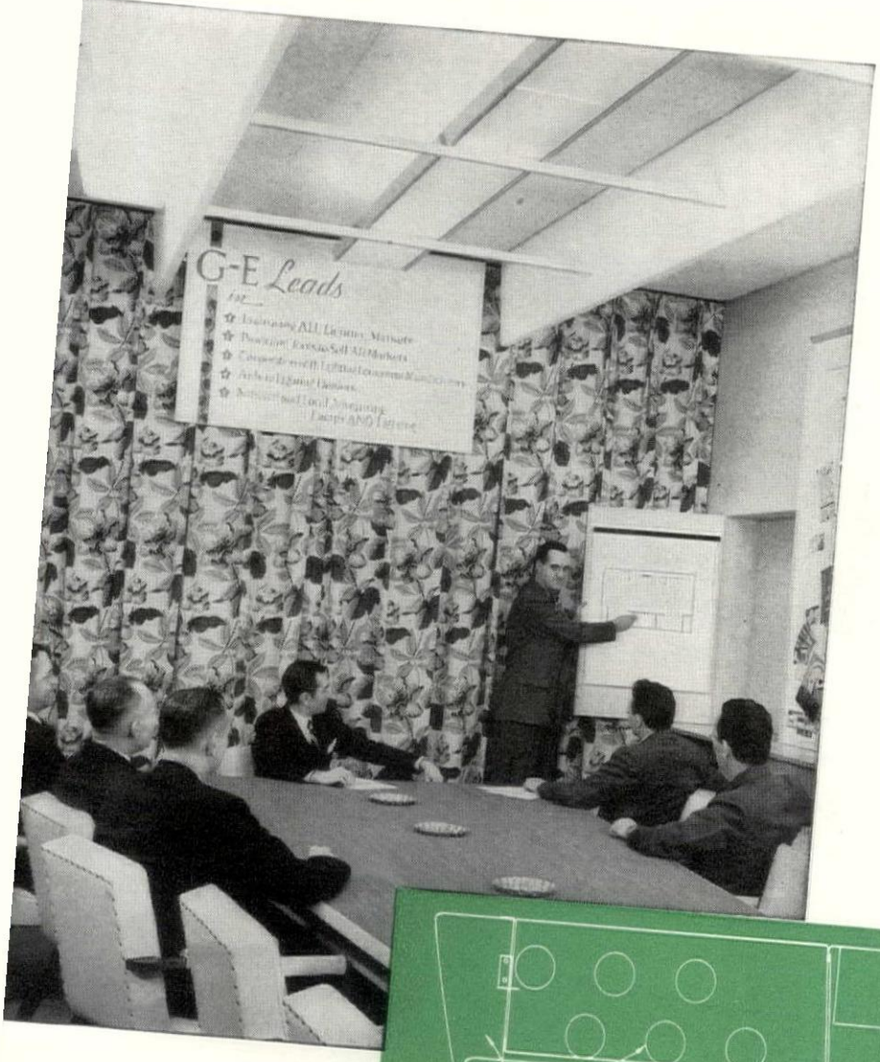
And so leading manufacturers of building products and materials (375 of them) invested $1,380,000 in 1948 to reach these leaders through the FORUM.

No other building publication even approaches the FORUM in such advertising revenue—or such coverage of the people in building who count.

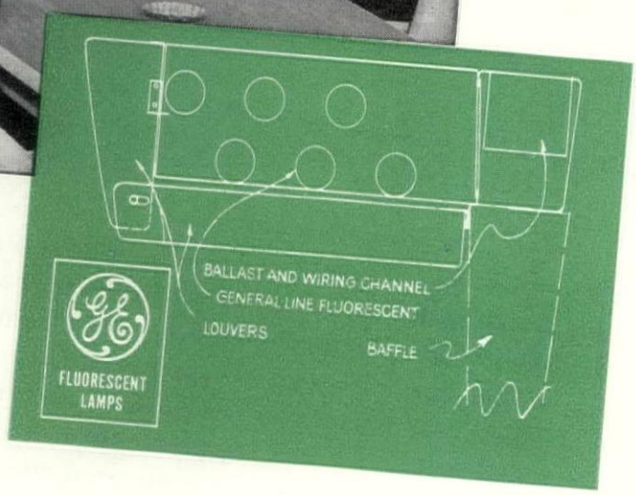


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MAGAZINE OF BUILDING

its leadership is also yours to use . . . . . IN 194



BRIGHT IDEA FOR IDEA ROOMS





IDEAS come easier in a comfortable, well-lighted conference room like the one above. The General Electric 40-watt, instant-start fluorescent lamps provide 60 foot-candles of soft, comfortable light on the table, yet cannot be seen by anyone sitting opposite them. Charts and displays on the tackboards are highlighted by the same ceiling lamps.

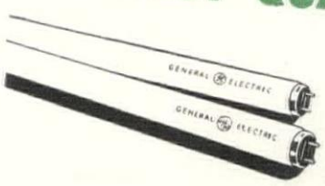
The two rows of General Electric Lumiline lamps in the center of the ceiling provide a "bridge" between blackout (for film projection) and full lighting. They are controlled by a dimmer rheostat at the end of the table.

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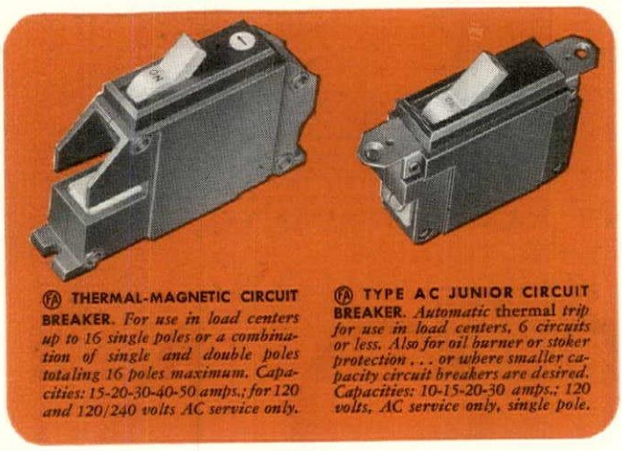
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ROBERT W. HINKLE, architectural student, 4615 Filmore St., Pittsburgh 13, Pa., requests literature on hospital design, materials and construction for a thesis.

THE KERN COUNTY PUBLIC WORKS DEPARTMENT, 2717 "O" St., Bakersfield, Calif., requests information on materials, fittings and trimmings for all types of municipal buildings.

ROME A. RIEBETH, Housing Editor of The *Minneapolis Star and Tribune*, Minneapolis, Minn., requests information on new products, materials and equipment for use in private homes.

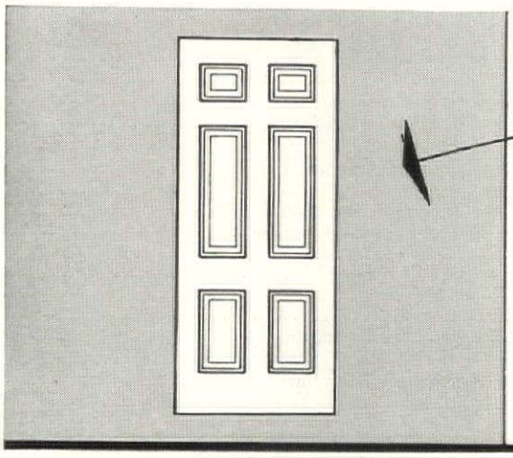
WALKER PRODUCTS CO., distributors and contractors, Lincoln, Kans., desires literature pertaining to the residential building field, home appliances and furnishings.

WATT PLUMBING, AIR CONDITIONING & ELECTRIC, 528 East 5th St., Tulsa, Okla., requests engineering data on equipment used in commercial, industrial and residential work.

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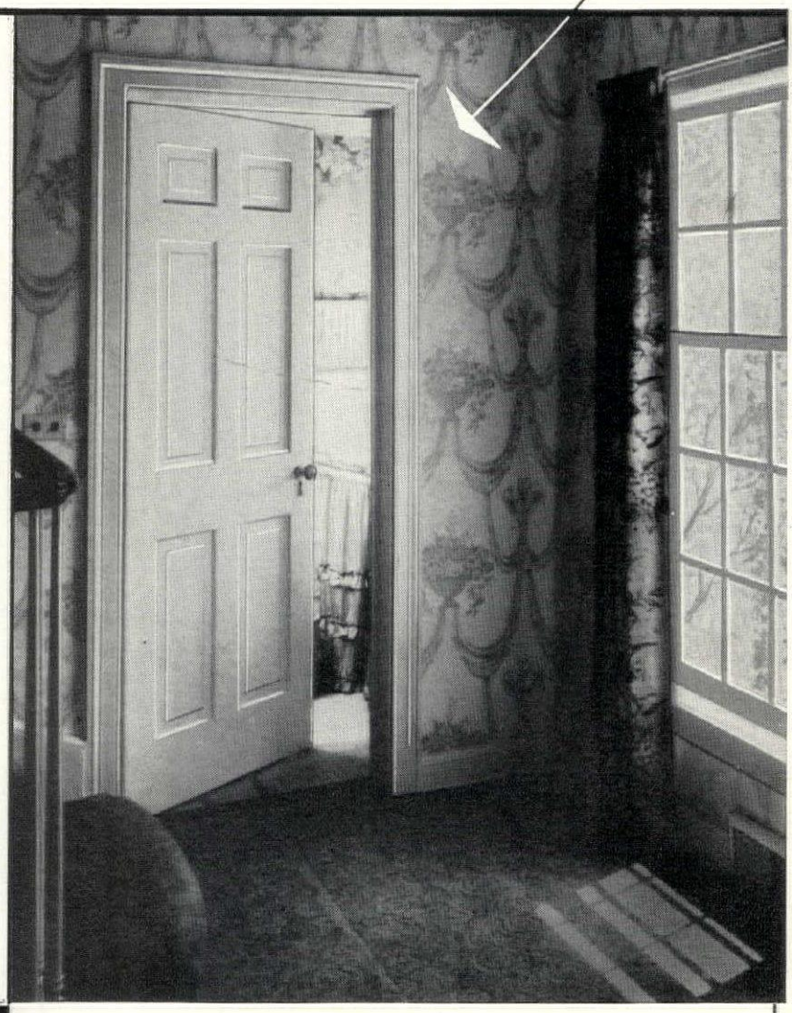
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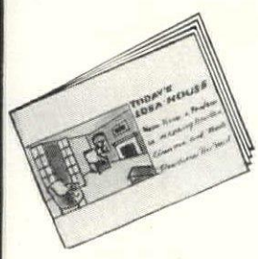
Many styles of Ponderosa Pine doors and windows are illustrated in the booklet "Today's Idea House." Full of actual photographs, this book can be a valuable help in planning interiors. A copy of "Today's Idea House" is yours for the asking —just mail the coupon.



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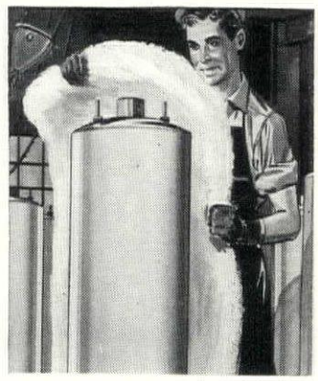
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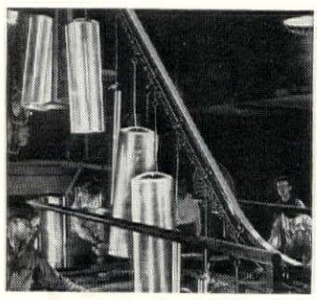
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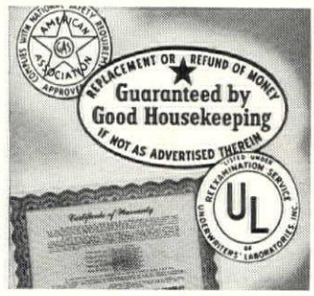
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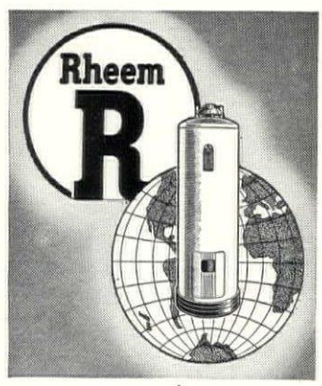
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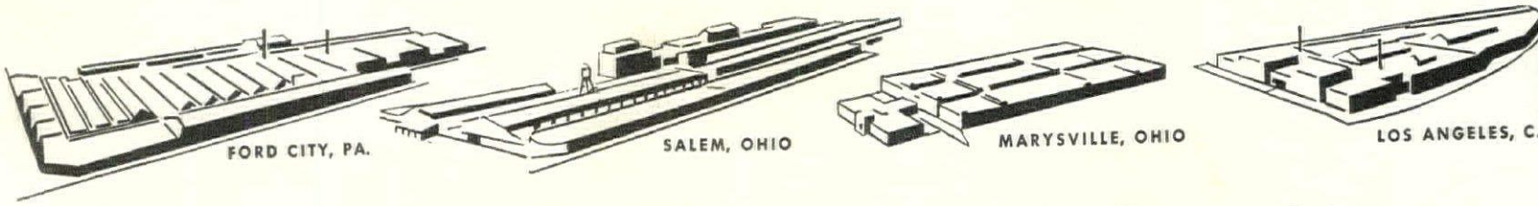
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